THE GENESEE FARMER.

Agriculture is the most Healthy and Honorable, as it is the most Natural and Useful pursuit of Man.

VOL. X. ROCHESTER, N. Y.—FEBRUARY, 1849. NO. 2.

AGRICULTURAL EDUCATION.

It gives us especial pleasure to notice the strong recommendation of Gov. Fish to the Legislature, to endow an Agricultural School. A whole generation has passed off the stage since Judge Buel reported a bill in the session of 1822–3, to establish such an institution as is now for the first time commended by an Executive of the Empire State. How sure, but slow is the progress of public opinion! Mental training and professional study are deemed by every body necessary to qualify a man to be an officer in the army, the captain of a ship, a clergyman, lawyer, surgeon, or any thing else of the least pretensions to science, but farming. The professional agriculturist is thought by many to need no particular knowledge of the origin, composition, and capabilities of the various soils which he cultivates. For him to study the chemical difference between granitic, syenitic, felspathic, slate, sandstone, and limestone rocks, by the weathering and disintegration of which all the minerals in his lands were derived, would be, in the opinion of some, as waste of time.

Thousands of practical farmers know that wood ashes are excellent fertilizers, and contain considerable *potash* and other valuable minerals, but they would not permit their sons to attend an agricultural school provided with a good laboratory to extract from the parent rocks and soils every *atom*, whether potash, lime, soda, magnesia, iron, chlorine, sulphur, phosphorus, flint, carbon, nitrogen, or the elements of water, taken up by a forest tree or a cultivated plant. They seem to cherish a kind of morbid, hydrophobia dread of an increase of knowledge on the part of the great agricultural interest of the country. Such men would not take an agricultural journal on any account; nor read a book on any rural topic, nor permit their children to study one, lest some new light should disturb their profound Rip Van Winkle sleep in after years.

Fortunately, the absolute rule of this class of farmers is drawing to a close. They have had their day, and it has been a long and gloomy one. A new era has dawned upon the world to bless the children who are to follow the plow in after life. Unlike their fathers, they will be taught to know what changes the plow, harrow, cultivator and hoe effect in tilled land. Every man sees that these implements which have been in use so long without a *why* or a *wherefore*, neither add to, nor take away from the soil. What *chemical changes* in the elements and combinations of earth do the plow and the hoe bring about, so beneficial to the husbandman? Who can say that no farmer applies too much, none too little labor, to give the most profitable return? Who dare assert that he adapts each fertilizer to the particular wants of every crop? and never fails to sow or plant the kind of vegetable with the elements of which his soil is most abundantly supplied? Who is certain that he makes the best practical use of the mold, manure, lime, potash, gypsum, bone dust, and other substances appointed by Providence to form every cultivated plant? Think of these things.

Alas! that so many should believe that they are *too wise* to learn any more about the natural laws which regulate the organization and growth of all crops and domestic animals. Such have not begun to study. Establish one good school, and the fact will soon be apparent, that at least half a dozen more should be added to the list. Indeed, we fear that there may be so many sections, each eager to get the institution located in its neighborhood, as to defeat the scheme altogether for the present. This will be the height of folly. Considering the efforts that were made in that behalf in 1843, 4 and 5 by the friends of the measure in Western New York, it would seem to have a pretty strong claim to the honor. But we care infinitely more for the advancement of the cause, than for the location of the school. We hope to live long enough to see honest manual labor and high intellectual culture fairly united; just as God has united in the same person both hands to work and a mind to reason. Science needs but to be fairly understood to secure an enduring place in the popular heart.

Encouragement — *Thanks.* — During the past month we have received abundant evidence of the high estimation in which this journal is held by all classes of citizens—farmers, mechanics, and members of the learned professions. Though its chief patronage is derived from agriculturists, the Farmer receives a large portion of its support from, or through the influence of, men of other professions and occupations. Many clergymen, physicians, mechanics and merchants in all sections of the Union, are actively engaged in extending its circulation. We would fain tender suitable acknowledgments to all who are laboring to promote the cause of improvement in this manner. And we invite others to present the Farmer to the attention of their friends.

DEEP AND SHALLOW DRAINING.

It is loss of time to discuss whether deep or shallow drains are best, till you know what kind of strata you are going to cut through. Both are good when the soil is adapted for them; and nothing but experience and great practical knowledge can tell what depth, what distance, and what direction they should be cut in; and not then, till he sees what form the land is in, and what kind of strata lies under. There can be no uniform system for draining. The process must be entirely governed by the nature of the strata and how it lies.

In the length of my practice, which is upwards of forty years, I have drained almost all kinds of lands from 2 ft. and 2 ft. 6 in., to 3 ft. 6 in. and 4 feet. The different kinds of subsoil rule these, and what depth they lie, and whether they are porous above and retentive below, or retentive above and porous below. A man cannot tell which of these depths are best until he comes to execute the work. I have found them all to answer when the strata is adapted for them. Respecting the distance, that depends upon the form the land lies in, and what kind of strata lie under. I cannot find any body that can give a reason why drains should be cut 5 feet deep in stiff clay, and the clay put on the bare pipe or tile again. In the course of my practice I have seen one of clay put upon the brushwood which was put upon the tile; and which prevented the drain from having the desired effect. Every farmer that is a little acquainted with the spirit level, considers himself competent to the drainage of his land, without the assistance of a practical man; and in cases applying solely to clay and surface water the object is generally well effected; but where the land is springy, the strata varies, and the water breaks out at different levels, the spirit level must be used with great care, and with the aid of a practical man. In these cases I consider parallel draining of no use, as it would double the cost of the land, and not have the desired effect. But these things would require a practical man, and he must have the knowledge and use of the spirit level, or else he cannot make an estimate of what the draining of an acre of land will cost. In the course of my practice I made an estimate to the amount of £1,921 18s. 6d., and contracted for that sum before a drain was cut. Whenever I find it necessary to cut to any depth in clay, I always fill the drain up again with some kind of material that will admit of free access for the water to the tile, and spread the clay on the land. I have known a piece of land drained from three to four feet deep, and the clay put in again, and the land was none the better.—*Cor. of Chester (England) Chronicle.*

Coming from a practical man of large experience, we regard the above brief remarks on deep and shallow draining, and also on the impropriety of filling a ditch with compact, impervious clay, over a stone, tile, or brushwood drain, as exceedingly valuable. The writer says that he has had 40 years experience in draining lands, and made estimates and contracts in single jobs of £1,921 18s. 6d., equal to nearly $10,000 our currency.

The practice of carting off the clay excavated in digging ditches, after it has undergone the mellowing and chemical influences of sunshine, frost, oxygen and carbonic acid, above ground one year, and spreading it as a fertilizer over the field, we have seen performed with great success at the South. It may be removed as fast as the clay is dug out in making the ditch; and some planters have horse carts at hand for that purpose—each shovelfull of earth being thrown into a cart, rather than on the ground by the side of the excavation. Others use a scraper, and with it haul the clay thrown out back into any low places that may exist in the vicinity. Whether the soil and subsoil thrown out in digging a ditch be taken off immediately, or allowed to dry, freeze, and more or less decompose, before it is carried away to be used as a fertilizer, or to fill hollows and depressions, is, probably, not very important. It may not however be amiss to inform our young readers *why* such soils often partake of the character of marl, and are of far more value as a top-dressing than would be an equal quantity of dry upland surface and subsoil excavated in a similar manner. The elevated position and perviousness of the latter, naturally favor the washing away of all their soluble salts of lime, potash, soda, magnesia, alumina, &c., and all decomposing, soluble mold, by the rains and snows that fall in the course of the year. Low grounds are less exposed in this way. On the contrary, the surface of the earth in such places is often saturated with water that has leached through the fertile soils of uplands, and dissolved out of the same not a little of both the organic and inorganic food of plants. This water evaporating in natural basins, or on level surfaces, leaves its fertilizing lime and other elements behind. The cream of high rolling lands, and especially when cultivated, is constantly flowing, both in limpid springs and turbid surface streams, into the basins and over the flats of lower levels. The same causes which render the ocean and seas salt, and furnish an abundance of nourishment for the support of myriads of marine plants and animals, operate to enrich all low lands. Valuable as these generally are when well drained, they are usually worthless without it for agricultural purposes.

Having intimated the impropriety of filling up ditches over wood, tile, and stone drains, with compact clay, it follows that they should be covered with sand, gravel, or some earth through which water can easily percolate. It is proper to remark in this connection, that Englishmen of large experience are not agreed in regard to the propriety of using the clay dug from a ditch to fill the same over the conduit for carrying off water at its bottom. Many adopt this practice and say that it answers every desirable purpose. Others fill with small round stones, gravel, sand, or loose earths. To prevent the filling up and stoppage of the drain, no surface water with its mud and sediment should be permitted to flow into it. All water should filter through soil or sand before it enters the subterranean passage. This alone will prevent the necessity of taking up and opening the drain anew, and often. A drain well made will last for ages and need no repair—operating as a perennial spring. As one means of promoting the health of the human family and domestic animals, the drainage of swamps and all wet, low grounds, deserves far more attention in this country than it has yet received.

Pea Bugs.—Various remedies have been suggested to get rid of the pea bug—such as scalding the seed, putting it in bottles hermetically sealed, &c. The first has its objections, and the second retards the growth and exit of the bug until after planting time, but does not in all cases destroy it unless more air is abstracted from the bottles than can well be done without apparatus. A certain way is to gather in one year your seed peas for two, put them in separate bottles, and leave the bottles for the second year corked up until you want the peas to plant. Peas lose none of their vitality by being kept, (they have been found to grow taken out of an Egyptian mummy,) and it is a question whether, like melon seed, they are not all the better for keeping. A. H., *Meadville, Penn.*, 1848.

Never allow the seeds of any weed to ripen on the ground. If this were always attended to, a garden or farm would soon be cleaner, and in time clean.

ANALYSES OF FIVE VARIETIES OF CABBAGE.

Mr. J. H. Salisbury, assistant in the Laboratory of Prof. Emmons of Albany, has made a valuable contribution to the farming and gardening interest of the United States, through the pages of the December number of the American Journal of Agriculture and Science, by publishing the results of ten analyses, five of the organic and five of the inorganic elements of as many varieties of cabbage. This is a most nutritious vegetable; and we believe it can be grown with sufficient economy to aid in making butter, cheese, and wool, with a fair profit to the husbandman.

Every farmer knows that cabbage needs rich land; Mr. Salisbury has demonstrated the reason *why*. The varieties examined by him are the Drumhead, Savoy, Red cabbage, Cauliflower, and Turnep cabbage. They all contain a good deal of water. 100 parts of the head of the common white or large Scotch Drumhead gave only 11.335 dry weight and 88.665 water. The Savoy contains about 2 per cent. less of water, or 13.475 parts dry matter in 100 of the fresh head. The Cauliflower contains still less water, having 14.300 per cent. of dry substance. The Turnep-rooted cabbage has nearly as much water as the common turnep itself, giving 91.140 parts of the pure liquid in 100 of the plant.

Estimated dry, the Drumhead contains 6.969 per cent. ash; Savoy 6.605; Red cabbage 7.695; Cauliflower 10.629; Turnep cabbage 9.086. They all abound in phosphoric and sulphuric acids, combined with soda, potash, magnesia, lime, and iron. They are quite an exhausting crop. Supposing an acre of choice land to yield, as it has done, 36 tons of the Drumhead variety, the crop would take from the soil in pounds, the following minerals:

Silicic acid,	2.953 lbs.
Sulphuric acid,	56.134 "
Phosphoric acid,	63.784 "
Phosphate of per oxide of iron,	5.916 "
Lime,	14.434 "
Magnesia,	17.986 "
Potash,	142.448 "
Soda,	161.772 "
Chlorine,	3.978 "
Total,	468.450 "

Of these 468 lbs. 304 are pure soda and potash, and 120 lbs. phosphoric and sulphuric acids.

Cabbage is found to contain a large amount of organized nitrogen or azote. Calculated dry, i. e. after the water is all evaporated, Drumhead gives 17.899 parts in 100; Savoy 20.281; Cauliflower 20.763; Red 16.212; Turnep-rooted 19.052. Dry lean beef and dry blood contain within a fraction of 15 parts in 100 of nitrogen. Skin has 18.72 per cent.; wool, hair and horn a little less than 18 per cent.

From the above statement it will be seen that the plant under consideration is remarkably rich in nitrogen, phosphorus and sulphur; and when cabbage decays or rots, it smells not unlike decomposing meat or eggs. A cow can elaborate a good deal of cheese, and a turkey organize eggs, by eating cabbage.—That healthy children can be raised in a good degree on this food, other countries beside Holland and Belgium can bear witness.

A vegetable so abounding in the elements of bone, skin, brain, and all flesh, demands a soil pretty thoroughly saturated with *animal* manure. The liquid excretions of animals, common salt to yield soda, wood ashes to furnish potash, bones to supply phosphoric acid, and gypsum to add sulphur and lime, will all come in play. With rich well-plowed land, industrious boys can raise and house, or bury in the lot, a good many dollars worth of cabbage, and not greatly interfere with their other duties. See that the seed is sown early, and every thing attended to in season. Perhaps the large per centage of water in this crop will deter some from trying to grow 36 tons on an acre. It should not. There are 75 lbs. of water in 100 of fresh lean beef. Near cities where night soil can be had, cabbage seed might be drilled like turneps in fields, and cultivated partly with a small plow, or some other implement drawn by a horse.

GOLDEN DREAMS.

California Gold, its effects on business and black legs—Advance in land and digging 'taters—Beggary of Mortgagees and Silk Stockings—Considerable of a Shower—All the world mad and in straight jackets—The wise all rich, &c.

What will be the result of the recent discovrey of the precious metals in our new acquisitions from Mexico, on the business, morals, and politics of our country? If only a moiety of the reports are true, and there can not be a rational doubt indulged on the subject, there is a revolution at hand in all of our preconceived notions, habits, and pecuniary relations, such as the world never experienced.

If gold was as plenty as iron, it would be worth no more than iron, nor would a pound of it buy any more belly timber than a pound of iron. Real estate, farming lands, and labor, being the only real producing agents, the *primum mobile* of wealth, must advance with giant strides; and all those who now live on the representative of the "almighty dollar"—on the dividends, or interest of bonds, mortgages, government stocks and others of fixed value, and all who subsist on salaries, annuities and pensions, will become beggars. The time is at hand when a barrel of flour will cost $20, a pound of meat and butter 50 cents, and other necessaries in proportion; a half eagle will not buy as much as a silver dollar will now; the dividends and salaries that now support the wealthy in luxuries and extravagance, won't buy Johnny-cake and salt to support nature.

If gold becomes extremely plenty, it must of necessity depreciate in value, or rather every article of production will advance in price, as it always did and ever will, at every great inflation of the currency. No man ever got five dollars very easily, but what he did, or was tempted to play the fool with it; what has been, will be, to the end of time.

Land, machiney, and labor, will be the great levers that will move the world, and before one year passes, if the clouds of the golden shower continue to rise from the western horizon, there will begin an inquiry for real estate, and monied capitalists will resort to that investment as the only ark of safety for their funds; so old square toes, hold on to your acres and bide your time — don't be fooled with the idea that "it is not going to be much of a shower."

Now, is there any foundation for believing any of these predictions? Let us see. The accounts that we receive is, that gold is found in various localities embracing 10 to 20,000 square miles of surface—say 10,000, that is 640,000 acres, which at 10 acres to a person, which is a mineral lot in the U. S. lead mines, would allow a lot to 64,000 persons. Each one procuring an ounce per day, which is a low rate, is considerably over a million of dollars per day, and

equal to 300 millions a year, and lee-way for the rainy season and other casualties. The bullion of the world does not probably exceed 1000 millions of dollars, and at the above rates it would be doubled in about three years; to say nothing of the diamonds, platina, silver, lead, and quicksilver which are found in that region, in which case the result is inevitable, we shall all go mad under the new dog star. So be it. We are willing to trust our individual luck at catching larks when the sky falls. The wise will grow rich and the fools poor; but whether temperance, honesty, charitableness, morality, content, happiness, home made coats, and stogy boots, and hard hands, and honest hearts, will prevail in this happy land, under this state of things, is another affair — which this deponent at this time sayeth not.

NOTES FOR THE MONTH.

BY S. W.

PROSPERITY OF FARMERS. — It is universally admitted that the farmers of Western New York are by far the most prosperous moneyed class of our citizens at this time. What the Erie Canal has not done to produce this result, the Railroads have at length accomplished. Slaughtered hogs now bring 5¼ cents the pound, and sheep $3 a head, to take east on the Railroad. Thanks to the drovers, beef is hardly to be had at any price; and poultry *is not*. Farms all alluvial (as our formations are,) are now in demand at improved prices. Our farmers — at least some of them — begin to learn that it is easy to have a new farm beneath an old one; ditching and draining are two items now added to the routine of farm labor. If the more obtuse of our rural population still resist modern improvements, they no longer scoff at them. Slow as farmers have been to embrace the late new theories and improved practice in farming, in this age of universal progress and astounding discoveries, they no longer hang back, but are up and doing.

TOP DRESSING. — The London Farmer's Chronicle has a long, interesting article on "top dressing fruit and garden grounds." If the advantages of top dressing are so manifold in the cool and humid climate of England, how much greater benefit may be derived from it during our hot dry season? It is not generally known among farmers, but such is the fact, that a newly planted tree may be often saved alive, by a top dressing of straw for several yards around the tree, when watering alone will have no power to save it; this covering keeps the soil both loose and moist. Subsequent top dressing with long manure, turning the same under and planting potatoes, will very much accelerate the growth of the trees; the crop of potatoes being clear gain.

One of the great advantages from not feeding meadows and pastures too closely, is the top dressing or shade of the surplus grass. The theory of the "fertilizing effect of shade," is no new theory. Some of our shrewd Cayuga County farmers have long since eschewed the practice of summer-fallowing for wheat.

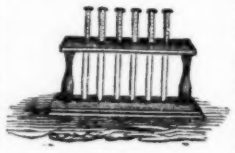
FATTENING BEEF AND PORK. — Whenever I see a farmer peddling half fatted pork, I ask the age of the hogs. Strange as it may seem, such animals have generally starved through two or three winters; and it requires no exercise of faith to believe the farmer's story, that it took fifty bushels of ears to get them started, or *on the lift*. The science of making the most pork with the least feeding, is to keep the hog growing from the start given him by his mother's milk. 'Twas but the other day that I saw a farmer who disports himself on 150 all arable alluvial acres, hawking about a few quarters of lean cow beef; am I in the wrong for saying that I instinctively felt as though all the fat of that animal had been lost, without one cent of corresponding gain to the farmer. I once knew a farmer who suffered his sheep to eat out one side of a stack of hay, when it fell over and crushed several sheep to death. This farmer averred with a smile that the surviving sheep were enough better for their extra feed to compensate him for the loss! But the man who essays to fat a half starved animal from fall to Christmas, has not even the excuse of the sheep story.

BUTTER AND BUTTER MAKING, WITH NOTICES OF VARIOUS CHURNS, &c.

BY HORACE L. EMERY.

BUTTER MAKING is becoming more generally understood as the farming public become convinced that it is governed by, and in fact depends upon, certain fixed principles, the knowledge of which enables the farmer to produce with certainty more and better butter, and that with uniform if not less expense.

In the first place, the cows of a butter dairy should be selected with special reference to that purpose; for every dairyman has learned by observation that the cow that gives the most milk is often worth little or nothing for making butter. This selection is greatly facilitated by means of the *Lactometer*.— (See figure.) It is simply a series of glass tubes open at the top and set perpendicularly in a frame. These tubes are some 10 inches long, and graduated in inches and eighths from the bottom upward. In using it each tube is supplied with an equal quantity of milk from a separate cow, and all allowed to stand until the cream is risen; then, by examining the tubes before a strong light, the comparative quality of each cow's milk is instantly known by the proportion of cream it contains—thus showing the dairyman at once which cow is most profitable for butter and which for milk.



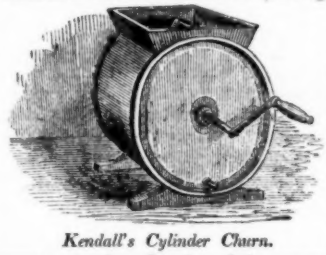
Lactometer.

The next thing, in order to succeed, is to obtain the greatest possible quantity of cream from the milk. To this end it should be allowed to stand without being disturbed in a cool, ventilated place as long as it remains sweet, when it should be taken off and churned — the sooner the better. Many churn the new milk — others the cream and milk together, even after it has become sour. The objection to churning new milk is that a less quantity of butter is produced, and unless the sweet butter milk can be profitably used, a loss of butter, as well as of labor, is the consequence. The objection to churning milk and cream together is the unnecessary labor caused by it, and the objection to keeping it too long before churning, is, that it becomes more and more acrid until it will produce but indifferent butter, at best, and that will remain sweet but a short time even if it is so at first. This last fact may be accounted the principal cause of the great proportion of poor butter in the market.

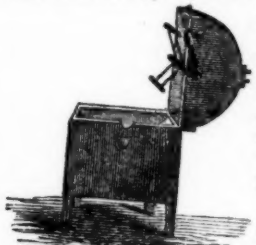
The next thing in order is to churn the cream in the most simple and direct manner. To this end it is necessary to know the structure of cream and in

what state the butter exists in it before the operation. Having carefully examined with a powerful microscope sweet milk, cream, and butter, in the various stages of the operation, I have found the particles of butter in the form of minute globules existing in each and every case without the least perceptible change. In milk the particles appear independent of each other, floating in the fluid. In cream they appear to have partially collected together, not being compact but the interstices filled with the more fluid parts of the milk. In butter they appear closely compact, the fluid being entirely expelled. By various experiments it is ascertained that these particles unite more readily at some temperatures than others, producing at a proper temperature more butter and that of a better quality. If too warm, the adhesive power of the particles is in a measure destroyed and a portion only can be secured, while what is collected is soft and colorless. If too cold, the particles become hard and refuse to unite, though often brought in contact, the result is as before — only a part of the butter is secured and that hard and crumbling. The proper temperature for producing the most and best butter is from 58° to 60° Fahrenheit.

The continued agitation of the cream or milk is the means commonly used to promote the separation of butter from the fluid. This is a simple process and is performed in various ways—in some countries by placing the milk in leathern bottles upon the backs of camels, where the motion of the animal agitates the milk. In this country the ordinary upright dash or barrel churn has been longest known, and produces, under equal circumstances, as much and as good butter as any other kind in use. The Cylinder Churn known as *Kendall's Patent* (see figure) is probably as extensively in use as any other, if not more so. Its principal advantages over the dash churn are, that it produces an equal and uniform action by means of a crank, the most natural mode of applying manual power. The paddles are readily removed to take out the butter and it is easily cleaned. The *Thermometer Churn* is similar in its construction to Kendall's, except it has two metalic cylinders — one within the other, and the cream is tempered by introducing hot or cold water between them—the temperature being at all times indicated by a thermometer permanently set in the cylinder. The principal difficulty with this churn arises from the butter adhering to the inside of the metalic cylinder. Were it not for this objection, it would be the most complete churn in use.



Kendall's Cylinder Churn.



Gault's Cylinder Churn.

Another kind much in use and highly approved is *Gault's Cylinder Churn.* (See fig.) The principal difference between this and Kendall's is that it opens in the middle and never can be more than half full; this would make it necessary to use a large and more expensive article for the same dairy.

Still another kind has been recently introduced, called the *Atmospheric Churn.* (See figure.) Its form is square and it has a perpendicular hollow shaft in the center terminating at the bottom in two horizontal hollow arms. By means of crank and gear this shaft is made to revolve rapidly in the direction of the arrows, (B B,) causing the air within the horizontal tube (D) to be thrown out by centrifugal force at the open ends. The fresh supply of air rushing in the upright shaft at *c, c, c, c,* to supply the arms D, thus causing a commotion by the combined action of the tubes, air, and square form of the churn.

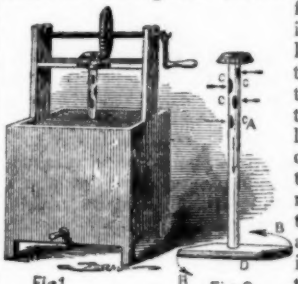


Fig 1. Fig 2.

Atmospheric Churn.

The inventors of the churn last named claim that, by the aid of the oxygen absorbed from the atmosphere, butter is produced in less time and with less labor; but experience shows that the separation is caused by the agitation which forcibly brings the particles in contact where they unite and collect in large masses, if the temperature is favorable. In a public trial of the Atmospheric Churn under different temperatures, at the N. Y. State Agricultural Society's Rooms in this city, in September last, it failed to produce butter at all at a temperature of 78° Fahr. After reducing the temperature by ice to 58° and dividing the cream equally between this and Kendall's Cylinder Churn, both were put in motion at the same time. At the end of seven minutes the Atmospheric Churn produced one pound of butter, and the temperature of the cream had risen to 68° Fahr. In ten minutes the Kendall's Churn had produced one pound seven and one-half ounces of butter, and the cream had risen only to 62°. The extraordinary change in temperature in the atmospheric churn was caused by the absorption of heat from the air of the room, (it being quite a warm day,) which was constantly passing through the cream. Kendall's churn being almost entirely shut from the air, the cream was very little affected by it—thus proving conclusively that the presence and absorption of oxygen by the cream is not only unnecessary, but its introduction is often attended with much disadvantage. Could the air where the churn is used always be of the proper temperature, (which is impossible,) the atmospheric churn would undoubtedly become extensively used.

It may be remarked that, other circumstances being equal, the time occupied in churning makes no difference in the amount of butter produced; and consequently where done by dog or water power, the ordinary dash churn can be used to as good advantage as any other. But when manual labor is applied it is important that the process should require as little time as possible, and may be sooner and easier accomplished with either of the cylinder churns above described. *Albany, N. Y., January,* 1849.

NOTE.—For figure, &c., of Crowell's Thermometer Churn, see VOL. IX, page 69, of this journal.—ED.

"LABOR WELL APPLIED IS PRODUCTIVE OF PROFIT."

BY AGRICOLA.

FARMERS should ever bear in mind that "well directed labor" will ensure its reward. Of all classes of men, there is none upon whom this truth needs to be enforced more than the farmer. How many of our farmers are year after year toiling on, overwhelmed with their business on an immense estate, and at the close of the year the accounts are about balanced, and again the same toil and vexation must be renewed. If right directed effort had been put forth, no more land farmed than could be done to perfection, what a saving of labor, what an increase of profit, what a reward in every point of view, would be received! In traveling through the best farming districts of this State, we often find illustrations of this truth most striking.

I have in my eye a farm of medium size, which, a few years since, was any thing but neat and in order, and which gave sad indications that labor had not been "well applied." But a change has come over this scene. A new occupant takes possession, fixed in his principles — determined that he would carry out this great maxim, on which depends the prosperity and success of the farmer, that "What is worth doing, is worth doing well." Now how soon the farm begins to assume a new appearance. The fences are repaired, the land is drained where needed, the buildings are neatly repaired and arranged; manures are obtained best suited to the soil and crops which are adapted to this region; a new and improved stock of cattle, sheep and swine are secured, and in short every thing characteristic of the good farmer appears year after year, under the direction of him who knows how to *apply labor*. Instead of having, at the end of the year, to resort to loans to make up deficiencies, this same farm yields a return that gladdens the heart of the farmer. As years roll on, each succeeding one finds a larger balance in favor of well directed labor; and now, in addition to the ordinary appendages of a farm, there is reared, out of the profits of this well regulated concern, a neat and tasty cottage, in the midst of shrubbery the most tasty and luxuriant — all the work of him who started with the determination to do all things well. And this is not all, as the well regulated expense book is balanced; a profit which would gladden even the hearts of some of our bankers on the capital invested, is found on hand, to be applied as may best conduce to the comfort and welfare of an interesting family. There is no complaint of means to educate the children. They are brought up practically to appreciate the maxim that, "What is worth doing, is worth doing well," and their education prepares them to carry out in all the varied scenes of life this all important but too little practiced truth.

Let me then urge upon the farmers who read this paper,— and I am glad to know they are many, and among the most intelligent in our land,— to put in practice, if they have not already done so, this simple but effectual method of farm labor, which brings with it the most abundant reward, and without which they will in vain struggle on, never securing the end of their toil. Order is Heaven's first law — and let it be yours in every thing relating to your farm.— Remember you belong to a noble profession, and one that is destined to exert a mighty influence on the destinies of a world. As one man, then, let the American Farmers adopt as their motto, "*All things relating to my farm shall be well done*"—and no more should be undertaken than can be thus done — and soon he will be found to occupy that exalted position that will cause his influence to be felt the world over. Surely it can not be necessary to urge upon the enlightened, the intelligent, the hard working American Farmer, further considerations in support of a principle that must, on a moment's reflection, commend itself to every right-minded, reflecting man.

In the London Gardener's Chronicle I find the following anecdote which the celebrated ROBERT BAKEWELL used frequently to relate — he whose name is familiar to almost every one for his extraordinary success in breeding cattle and sheep, and to whom probably Great Britain as well as this country owes as much as to any one individual, for that system of breeding which has secured the choice breeds of animals which are now to be found. It is to our purpose as it gives the history of an old farmer, and one of olden times too, who was renewed by adopting the principle laid down as the heading of our article — "Labor well applied is productive of profit."

Mr. BAKEWELL said: "A farmer who owned and occupied 1000 acres of land, had three daughters. When his eldest daughter married, he gave her one-quarter of his land for her portion, but no money; and he found, by a little more speed and a little better management, the produce of his farm did not decrease. When his second daughter married, he gave her one-third of the remaining land for her portion, but no money. He then set to work, and began to grub up his furze and fern, and plowed up what he called his poor, dry, furze land, even where the furze covered, in some closes, nearly half the land. After giving half his land away to two of his daughters, to his great surprize he found that the *produce increased*; he made more money, because his new broken up furze land brought excessive crops, and at the same time he farmed the whole of his land better, for he employed three times more laborers upon it; he rose two hours sooner in the morning; had no more dead fallows once in three years — instead of which he got two green crops in one year, and ate them upon the land. A garden never requires a dead fallow. But the great advantage was, that he had got the same money to manage 500 acres as he had to manage 1000 acres; therefore, he laid out double the money upon the land.

"When his third and last daughter married, he gave her 250 acres, or half that remained, for her portion, and no money. He then found that he had the same money to farm one-quarter of the land as he had at first to farm the whole. He began to ask himself a few questions, and set his wits to work how he was to make as much of 250 as he had done of 1000 acres. He then paid off his bailiff, (who weighed 20 stone,) rose with the larks in the long days, and went to bed with the lambs; he got as much more work done for his money; he made his servants, laborers, and horses move faster; broke them from their snail's pace; and found that the eye of the master quickened the pace of the servant. He saw the beginning and ending of every thing; and to his servants and laborers, instead of saying, "Go and do it," he said to them, "*Let us go, my boys, and do it.*" Between *come* and *go* he soon found a great difference. He grubbed up the whole of his furze and his ferns, plowed the whole of his poor grass land up, and converted a great deal of corn into meat for the sake of the manure and preserved his black water (the essence of manure;) cut his hedges down, which

had not been plashed for 40 or 50 years; straightened his zig-zag fences; cut his water courses straight, and gained a great deal of land by doing so; made drains and sluices, and irrigated all the lands he could; he grubbed up many of his hedges and borders covered with bushes, in some places from 10 to 14 yards in width—and threw 3 and more closes into one. He found out that instead of growing white-thorn hedges and haws to feed foreign birds in winter, he could grow food for man instead of birds.

"After all this improvement, he grew more and made more of 250 acres than he did from 1000; at the same time he found out that half of England, at that time, was not cultivated, from the want of means to cultivate it with. I let him rams, and sold him Long Horned bulls," said Mr. BAKEWELL, "and told him the real value of labor both indoors and out, and what ought to be done with a certain number of men, oxen and horses within a given time. I taught him to sow less and plow better; that there were limits and measures to all things; and that the husbandman ought to be stronger than the farmer. I told him how to make hot land colder and cold land hotter, light land stiffer and stiff land lighter. I soon caused him to shake off his old prejudices, and I grafted new ideas in their places. I told him not to breed inferior cattle, sheep, or horses, but the best of each kind, *for the best consume no more than the worst.* My friend became a new man in his old age, and died rich."

Is it not true that, "Labor well applied is productive of profit?"

WIRE FENCE.—HOW TO MAKE, CHEAPNESS, &c.

BY T. C. PETERS.

THE experiment of Mr. ADAMS with wire fence, as detailed in the last number, is worthy of notice. The fence was more costly than it need to have been, and upon the whole would not be the thing for a long line.

I can not do better than to ask you to copy an article on the subject, in the January number of the American Agriculturist — premising, however, that I do not think it best to heat the wire, as I notice by an article in a late number of the Prairie Farmer, that when the wire has been heated it is apt to get bent, and gets out of shape. Perhaps Mr. ADAMS' suggestion as to the alternate use of a larger and smaller strand is worthy of adoption. It would enhance the price but slightly. A further improvement might be made by training the Prairie Rose, or any other climbing rose, among the wires.

"I AM glad to see the attention of farmers turned to this subject, as I believe at no distant day wire fence must become the leading kind generally over the Union. It is true that there is a difficulty in fencing against hogs, but even that can be overcome without much trouble as is hereafter suggested.

"I have never yet had any made, but intend to make a sample next spring. I have given the subject, however, a good deal of thought, and made inquiries and figures thereupon. From some small experiments I have made, there can be no doubt but my figures are mainly correct. I shall use No. 11 wire, cedar posts, as they are the most durable, and shall set them six rods apart, making the fence five strands high. The post being set, I should begin by boring an inch hole through each, at eighteen inches from the ground; then another hole eight inches from that, the next ten inches, then twelve inches, then fourteen inches; making the fence five feet, two inches high. After the wires have been drawn through and strained tight, drive plugs into the holes at each side to hold them in their places. Between each post, and one rod apart, drive down a stake, saw into it opposite each wire, perhaps an inch, lay in the wire, and drive in a shingle nail to keep it in its place. It would be less trouble to drive a small spike into the post and wind the wire round it by one turn, rather than to bore the holes; though the expense would even be more.

"The wire ought to be prepared in the same manner that it is for bridges, boiled in linseed oil for a quarter of an hour, and then dried, and the same process repeated three times. This anneals and at the same time coats the wire, and saves painting it. If, however, there be but a small quantity to put up, it would be better to heat the wire, and afterwards paint it. Coal tar would also be an excellent substance for that purpose. Now for the expense:

A strand of No. 11 wire, 80 rods long, weighs 25 lbs.	
80 rods of fence would weigh 125 lbs., at 7 cents,	$10.75
14 red-cedar posts, 25 cents each,	3.50
85 stakes, 1 cent each,	0.85
Preparing wire and painting,	1.00
Setting posts and stakes,	0.50
Putting up fence, including spikes, or boring posts,	1.00
Contingences,	1.00
Outside cost for 80 rods of wire fence,	$17.60

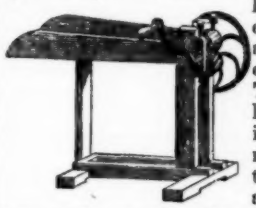
This would be 22 cents per rod; but the actual cost to the farmer would not be 20 cents.

"On most farms, where there is plenty of timber for posts, it would not cost but about 16 cents per rod. But allowing for all contingencies, and that it costs 25 cents per rod, it is then by far the cheapest fence that can be built.

"In order to fence against hogs, I would drive down short posts and put on boards about two feet, and put the wires above, but nearer together. I think that no hog that ought to go at large would ever get through. For all other kinds of stock, it would be impenetrable. A neighbor of mine, who is compelled to fence against a whole village of street cows, put but two strands across a stream, where his fence was washed away, and it has proved a perfect protection. I have seen the cows walk up to it, but have never yet known one to attempt to get through, although the temptation between a fresh pasture and dry streets was very great, I have no doubt. T. C. P.

Darien, N. Y., November, 1848.

TOWERS' HAY CUTTER.—This machine, like Stevens' and Hovey's, is constructed with a cylinder of knives cutting against a hide roller, with this difference,—the knives are straight, but placed diagonally upon the cylinder, and confined by movable cast iron heads, which receive the ends of the the knives, and when these heads are confined, all is held firm. This is a comparatively late invention and promises to work well. The manufacturers hold that this form of knife is best, as, being straight, it is more easily ground by farmers in general.



WANT of light to plants makes them pale, want of air makes them draw up long and slender; plants grown in the dark would be quite white.

DRILL HUSBANDRY.

THE broad-cast system of sowing wheat, oats, barley, rye, and peas, generally prevails in this country. It is not practiced because it is the best, but has been handed down from father to son, like an heir-loom, for many generations, and indeed is the only system of which the great mass of our farmers have any knowledge. The intelligence and enterprise of American farmers have become proverbial throughout the entire civilized world, and it is natural to infer that it is only necessary to point out an improved system of managing any branch of the ancient and noble profession of Agriculture, to at once enlist in its favor all those whose circumstances and means would admit of its profitable introduction. A portion of the agricultural press of this country have recently made favorable mention of drill husbandry, and in some instances the knowledge thus imparted has been seized upon and practiced in a manner highly creditable to the parties concerned.

In various portions of the United States may be found very sensible and enterprising farmers who originally migrated from those countries of Europe where drill husbandry has been long successfully practiced; but, strange to say, as if by common consent, it has almost invariably been the case that this as well as many of the other acknowledged improved systems of farm practice in general use in those countries, have been pronounced inapplicable to the agriculture of America. The system of passing wholesale opinions, and looking merely at the surface of things, does not answer a wise purpose at this enlightened period of the history of agriculture.—That drill husbandry can be profitably practiced in this country, has been thoroughly proved by the writer and scores of other American farmers, and when accompanied by horse hoeing, at least twenty per cent. may be added to the yield of those crops enumerated above. From a number of trials, some of which were made upon a pretty large scale, an additional average of five bushels of wheat per acre from drill husbandry alone, was produced; and when horse hoed, a still further additional average of five bushels per acre was the result. So large an extra yield as this should certainly be a sufficient inducement to influence every thinking man to make some effort in becoming acquainted with this or any other system of agriculture adapted to produce so favorable a result.

Some of the most prominent benefits to be gained by drill husbandry are, a saving of about one-fourth in seed; the regular distribution of seed in rows to a uniform depth; the free admission that is given to the air and rays of the sun, between the rows of the plants; the excellent opportunity that it affords the farmer for the eradication of noxious weeds that may appear in the growing crops; and for the use of the horse hoe in the early spring and summer months, by which a much larger growth of straw and yield of grain will be produced on most soils, and besides the ground will be thoroughly cleaned and improved in texture for the succeeding crops.

The saving in the quantity of seed is not an object that should influence a change of system in the mode of farming in this country, so much as that of obtaining a greatly increased yield; but nevertheless, when a large breadth of land is sown, a saving of one or two pecks of seed per acre is an item of some importance. When the seed is sown in rows, the roots of the plants, especially of winter wheat, become interwoven in each other and hence are not so likely to be thrown out and destroyed by the action of winter and spring frosts as if sown broad-cast, and besides the tops of the plants spread and cover the roots, which afford a natural protection to them during the most critical period in the growth of the wheat plant, in the northern sections of our country.

If a portion of a field be sown with a drilling machine, and another portion be sown broad-cast, that which is drilled will not suffer nearly as much by severe frosts as that sown broad-cast. After an extremely cold winter, or a cold backward spring, wheat sown in the ordinary method will in most cases have a sickly and stunted appearance; whereas that sown with a proper drilling machine will scarcely be affected by the frost. There may be exceptions to this rule, but after many years experience with both systems it has been found the case in almost every instance where drill husbandry has been efficiently tested.

The regular width between the rows should not be less than nine nor more than twelve inches. Where drilling grain crops is practiced with a view of employing horse hoes to clean the ground, the rows should be about eleven inches asunder; a less distance than this would be advisable, if the crops are not intended to be hoed; but if the rows be much less than a foot apart, it will be found difficult to efficiently work the land with hoes while the crops are in a rapidly growing state. Horse hoeing a crop of wheat or other grain, once or twice in the early part of summer, will promote a very strong and healthy growth of plants, and land that ordinarily produces only fifteen or twenty bushels per acre, will, under favorable circumstances, yield from thirty to thirty-five, and even as high as forty bushels per acre.—While this statement will be found to fully accord with the practice of most of those who adopt drill husbandry and horse hoeing, yet it must not be forgotten that there are soils which do not possess a sufficient amount of the requisite elements or food for the wheat plants, to produce so large a product, and hence a much less average increased yield must be taken in the aggregate.

A smart plow-boy with the aid of a horse, and a single drill horse hoe, will find no difficulty in cleaning three acres per day, in the long days of the month of May or June. Two such hoeings would not cost more then one dollar per acre, which is a very trifling expenditure, when the advantages resulting therefrom are carefully taken into account. By the use of the improved English self-expanding horse hoe, one man and a horse will clean in a more perfect manner than can be done by employing hand hoes, from eight to ten acres per day; but as these machines, being constructed entirely of wrought iron and steel, are very expensive, their use in this country is not likely to become very general.

The increased quantity of straw produced by horse hoeing a crop of wheat, barley, peas, oats or rye in the manner described, may be safely calculated at an average of thirty per cent. on the amount that would be produced by the ordinary method of sowing those grains broadcast. The value of this straw in many parts of our country, especially near large cities would be an object, and where it is not a marketable article, it will be found worth at least as much as the outlay in hoeing the crop, for the purposes of fodder and manure. The extra cleanliness of the ground

produced by the frequent use of horse hoes among growing crops, is an advantage that must not be slightly passed over.

The extra large yield of straw, the proportionably increased yield of grain, and the superior tilth or cleanliness imparted to the soil by the practice of drilling and horse hoeing the ordinary field crops grown in our country, are of such great magnitude that no intelligent cultivator should for a moment neglect to make himself thoroughly acquainted with the subject. Every one acquainted with the science and practice of agriculture must have observed the importance of thoroughly disintegrating or pulverizing the soil, and who is there but must have observed the powerful influence that a single hoeing has upon the growth of a crop of garden or field vegetables? No one would think of obtaining a full average of corn without previously pulverizing the ground for the crop, and also, would frequently employ the hand or horse hoe in keeping the ground clean, for the purpose of loosening it, so that the lateral and fibrous roots of the plants might have a perfect freedom in searching for the requisite supply of food to bring them forward to a full and healthy state of maturity. An equal benefit will be found in hoeing field crops, which work cannot be done unless the seed be sown in regular rows.

There are various methods of sowing grain in drills, and the variety of machines used for that purpose in Europe have become so numerous that a clear description of them would scarcely be found interesting to the American farmer. The ingenuity of our mechanics has within the few past years been happily turned to the investigation of this branch of agricultural mechanics, which has resulted in the production of machines for drilling grain that are in many very important particulars superior to the best in use in Europe. These machines are cheap and simple, and before we bring our series on "*Drill Husbandry*" to a close. shall be described, so that their particular merits may be understood and appreciated.

Although horse hoeing is not indispensable to drill husbandry, still, on the score of economy, it should rarely if ever be neglected, and hence in discussing the merits of the latter, we shall invariably press upon the attention of our readers the importance of the former.

DESCRIPTION OF SNOW-FLAKES.

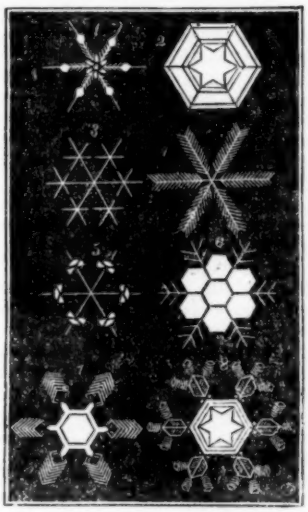
BY L. WETHERELL.

"Snow is the frozen moisture that descends from the atmosphere when the temperature of the air at the surface of the earth is near, or below, the freezing point."

The size of the snow-flakes depends upon two causes: when the atmosphere abounds in vapor and the temperature is near 32° Fah., the flakes are large; and as the moisture diminishes and the cold increases, the snow becomes finer. In the former condition of the atmosphere it is not uncommon to see flakes that are an inch in diameter. The lower the temperature the less the diameter of the flakes. At 10° Fah. snow-flakes rarely exceed seven-hundredths of an inch in diameter. Snow has been known to fall with a temperture that caused the mercury to fall 12° and even to 20° below zero. But this is not common.

The snow-flakes have a great diversity of form, which, as every accurate observer will testify, constitute beautiful and regular crystals; and it is the copious reflection of light caused by these, that gives snow its brilliant whiteness.

The bulk of snow, just fallen, is ten or twelve times greater, (more or less, depending upon the temperature and moisture of the atmosphere,) than that of the water produced by melting it.



Forms of Snow-Flakes.

Isolated crystals unite under angles of 30, 60 and 120 degrees. These by their different modes of union form several hundred distinct varieties of snow-flakes. Scoresby, an arctic navigator of great celebrity has enumerated six hundred; and these are all comprised under five classes. According to Scoresby the starred figure, (fig. 4) in the diagram given above, is observed when the thermometer is near the freezing point. The hexaedron, (fig. 2) is seen both in moderate and very low temperature. The diagram given above presents only eight of the ninety-six figures delineated by Scoresby. From it, however, the reader may be led to observe for himself, the great variety of forms which Infinite Wisdom has given bodies of so small a bulk as snow-flakes.

Red Snow and Green Snow have been known to fall in the Arctic regions. The cause of this is said, from examination, to be an infinite number of a certain class of microscopic plants which flourish at a very low temperature. But with regard to the worms which are reported to have fallen in this vicinity with the snow last December, I say as a distinguished naturalist of the age said to some one who told him that he had *seen* a shower of animals with his own eyes: "It is fortunate," said he, "that you have seen it, for now I believe it; had I seen it myself, I should not have believed it."

The uses of snow are too well known to the intelligent farmer to more than need naming. It has been properly styled, "the poor man's manure." It forms a warm covering for the soil, and thus defends vegetation from the severity of the winter. It also diminishes the intensity of the darkness during the long winter nights, and furnishes a favorable opportunity for the farmer to replenish his wood-pile, to move his fencing materials, and to carry his surplus produce to market.

REVIEW OF THE JANUARY NO. OF THE FARMER.

MR. MOORE:—I have been looking over your January number, and am much pleased with its appearance, both as to matter and manner. I admire that so few among your 20,000 subscribers become contributors to its pages. There is probably no one single individual among them but what knows some one fact that accident, experience or reason has taught him, that would be interesting and valuable to perhaps nine-tenths of your readers. I can hardly conceive of a person who has the good taste to take and read your paper, but what has the ability to communicate his experience through its pages. In my voyage of life I have never yet found that *sober* person that I could not dig something out of that was worth knowing. All useful facts, communicated in howsoever homely style, with your correction of grammatical construction and orthography, are of paramount importance. I am convinced that it is impossible for an editor—a single mind, to be able to amuse and instruct his readers, for years and years together, unassisted; his *pond* of thought, ideas and facts, will eventually run out—to use a homely phrase, his barrel will run emptyings; therefore, those interested in multiplying facts, and sending forth the knowledge and experience of years, in the different operations and effects of the great science of agriculture, ought to lend a hand.

You, reader—yes, you—as Nathan said to David, "Thou art the man," who can thus render some important benefit to your fellow laborer in the great battle of life; which, like the tears of the recording angel, may blot out some of your short comings, with the congratulation of saying, I have not lived in vain; a satisfaction that many, I fear, in this breathing world, who have heaped up the acres and the paltry dollars, will not arrive at and who will cease to be without being able to say, I have left one valuable fact or discovery for the benefit of mankind. Perhaps, Mr. Editor, I shall come broadly in that catagory; but if so, it sha'n't be for lack of good will.

There is a saying that Doctors never take their own medicines, and that they try it on a dog first; but with your leave, I propose to take mine and to try it on you, by looking over your monthly numbers and telling you plainly what some folks think of your articles—mechanical execution, errors of the printer, &c., &c., a kind of fire-side review, with the notions and views of one of the million.

MESSRS. EDITORS:—In your opening article for the January number, in speaking of the exhausting systems of planting and farming, you seem to be growing very *tender footed* on the subject of the "peculiar institution" of our southern brethren, in that its effects are not deteriorating and fatal to the soil it cultivates. It has been said that the foot of the slave was rank poison to the soil. This is not true, literally, and only co-relatively as a result. The system is fatal to the continuance and permanence of the soil's productibility. The cotton, rice, and sugar crops, can not at the present rates be made except by slave labor; all of these crops impoverish the soil, as there is no return—no rotation of grass, or other grain crops to enrich it; and in those warm climates, animals are not housed and fed to make manure, the land is soon exhausted, soon run down, and there is no remedy but a different system, different crops, and an intelligent population. The *pecooliar* institution must be abandoned, or new worlds discovered for its use.

Artichokes.—The article recommending that whatever is worth growing, is worth growing properly, is a truism not to be controverted, and which is applied to Horse-Radish and Artichokes, which I consider a nuisance and not worth growing at all. It would be a good operation to exchange them for Canada thistles—any thing but Red Root; and as to clearing them out yearly, it would take Father MILLER'S universal conflagration to do it, and nothing short.

Wire Fence.—Mr. ADAMS' manner of getting up this fence is ingenious, simple, and cheap; but that such fences can ever prevail, for turning cattle, horses, or hogs, is hardly admissable. The wires are so minute, that they are not visible and carry no terror to a creature disposed to ramble. An animal the least frightened, unruly, or wild, would mind it no more than the "spider's most attenuated thread."

Clover.—Your Grecian correspondent labors under a most singular hallucination, in asserting that clover will not grow when sown in the spring on the wheat crop. If cast early enough, before the frosts have ceased to elevate and crumble the soil, so as to cover the seed, it never fails if the seed is good, except the occurrence of an exceeding dry May, which often kills it. He is correct as to the value of Lucerne. It is like the Quaker's horse that had but two faults—one was that he was bad to catch, and the other that he was worth nothing when he was caught. It is entirely worthless in this climate.

Wire Worm.—Mr. MOORE, in an extract you give, has come to a singular conclusion on the subject of this insect—that by the use of sulphur on his seed (a dry insoluble and inert substance,) he saved a crop on the same field upon which he lost it three years ago.

It is not well settled what time is the periodic transmutation of the wire worm *(Elater segetis.)* Some make it two and some three years in the larvæ state; consequently if a field is troubled with it one year, at the third year they have taken the *imago* or perfect state and have departed, particularly if the land was under cultivation, as there was no food or convenience for propagating their species. Their natural *pabulum* is grass roots, and in its absence, young wheat, corn, potatoes, &c. In many locations, the first crop is invariably lost that follows green sward, that has laid in grass longer than three years.

Col. B. P. Johnson.—I think you will be sustained in your commendations of this gentleman's course, as Secretary of the State Agricultural Society, as well as for his attentions to the County Societies. His address at the meeting of the Monroe Society was capital. It was the only straight out and out, practical, direct to the point address I have ever heard delivered on these occasions.

SMALL HOLDINGS.—A small proprietor, who knows every part of his little territory, who views it with all the affection which property, especially small property, naturally inspires; and also, upon that account, takes pleasure not only in cultivating, but in adorning it, is generally of all improvers the most industrious, the most intelligent, and the most successful.—*Adam Smith.*

NEVER allow a hedge to get foul, or anything to grow in a ditch; it is a receptacle for weed-seeds, and if neglected would soon make the adjoining ground as foul as itself.

"WHAT COWS SHOULD FARMERS KEEP?"

BY WILLIAM HANFORD, JR.

UNDER the heading above quoted SANFORD P. CHAPMAN, in the October number of the Farmer, (Vol. IX, page 242,) has given us an able and quite an elaborate article. Undoubtedly Mr. C. has answered this question fully and correctly, so far as he offers a rule for the consideration of breeders and "judges at our Cattle Shows;" but when he comes to point to the place where "*right stock*" can be seen, in absence of the *testimony*, I, for one, shall *demur*. I do not, however, question the value of Mr. VAIL'S stock, "just to look at," or their ability to pay the expenses of a "good journey" for that purpose—but does his herd contain such cows as *farmers should keep?*

I have been taught in past volumes of the Genesee Farmer, that, for dairy purposes, our common stock is decidedly the best. Now, unless there has been error in my instruction, "full-blood Durhams," wherever found, are deficient in one and that the most important qualification. Beside this, the policy of farmers keeping Durham stock is questioned for other reasons,—among which, it is said, they are great consumers. In this principle, it will be observed, is involved the quality of feeding. But if Mr. CHAPMAN will produce satisfactory information of Mr. VAIL'S stock, or of that cow of his, of the worth of which he says he "knows," showing the management used—the kind, quality and amount of food given, with the profits arising therefrom—he will furnish to the readers of the Farmer an article of deep interest, if not of real value. In doing so he will also present us what we all desire in our agricultural operations, viz: *facts* with *figures*—the PRACTICAL with the THEORETICAL. *Dryden, N. Y., Dec.*, 1848.

AN article in last year's volume, headed "What kind of Cows should farmers keep," is worthy of serious consideration. After naming the several qualities that make a good cow, your correspondent says, he "never yet owned but one cow that came any where near suiting him," and that was a full blood Durham, for which he paid $150 in cash, and thinks her worth twice that sum. No doubt your correspondent has a fine cow; nor am I disposed to underrate that fine breed of animals, as a breed, but I do deny that their value is so much greater than any other breed. Suppose a man about commencing the dairy business, should purchase forty just such cows; it would amount to the nice little sum of $6,000. Allowing that said cows would produce thirty-five dollars worth of butter and cheese each, and you have as the product of one year $1,400.—Deduct the cost of keeping and interest on capital invested in cows, and you would have but a small income—to say nothing of the depreciation of said stock after they are seven years old, which would be full fifteen per cent. I think it is worth twenty dollars per head to keep such cows a year, which would be $800, interest $420, which sum deducted from $1,400, would leave $180.

Here comes another man, who has purchased his cows for one-fourth of said sum. They will make an equal amount of butter and cheese, and he has $4,500 to purchase land, or invest in State stocks, and is not weighed down by debt and taxation. But how stands the account: $1,400 worth of butter and cheese—deduct expenses of keeping, $800; interest on cows, $105; which makes $905 from $1,400, leaves $495; interest on capital invested, $315; these two sums added would amount to $810. I leave it for the reader to judge which of these two men would act most wisely. A. G. P. *Lyons, N. Y., Jan.*, 1849.

"LUNAR INFLUENCE"—AGAIN.

BY H.

MESSRS. EDITORS:—In the November number of the Farmer is a somewhat squirming and rather pie-*crusty* article from the pen Mr. J. W. DICKINSON, in answer to a brief communication from me, requesting information in respect to the cause of the TIDES. My inquiry was made in honest sincerity and good faith, and I was not a little surprised at the style and spirit of Mr. D.'s reply. I shall not, therefore, answer Mr. D. in full, but simply make a few remarks by way of explanation. And

1st. "Modern Philosophy." Here Mr. D. and I differ in our definition of the term. He calls "Davis' Revelations," &c., "Modern Philosophy," which I call modern "humbuggery," and if you choose modern *nonsense*, with which he seems to be more familiar than I am. If he wishes to see a specimen of what I call "Modern Philosophy," in distinction from the mysteries and absurdities of former times, or the nonsense of the present age, he will find it in "Arnott's Elements of Physics," and even in most of the treatises on Natural Philosophy, now in general use.

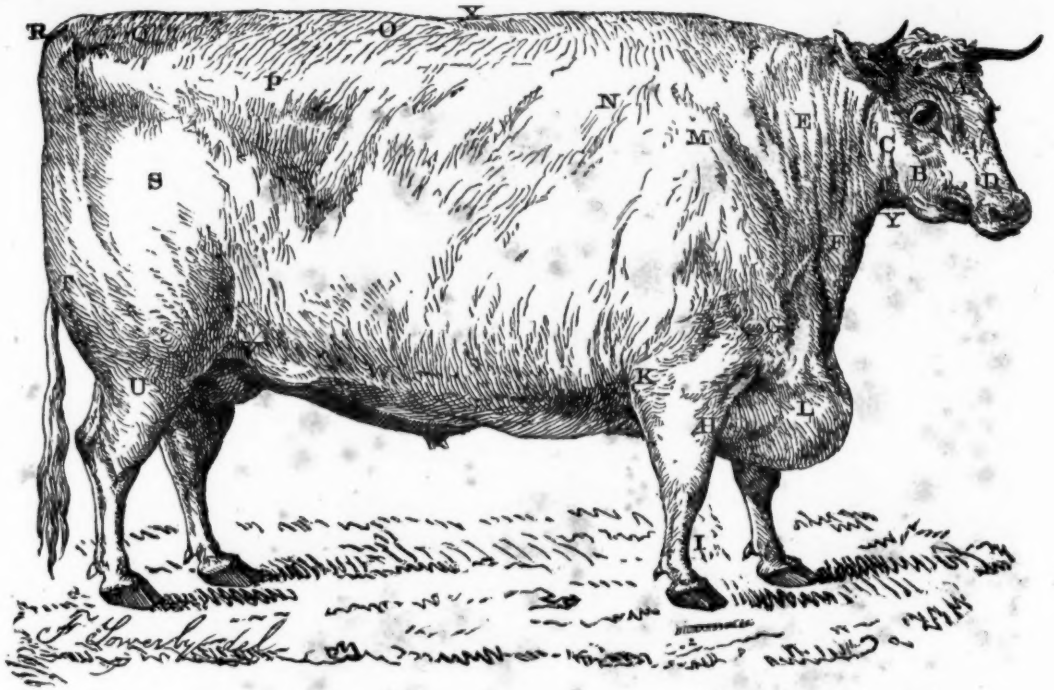
2d. Mr. D. regrets that I will not "argue the question with him." I have no occasion, and no wish to "argue the question with any one." I only asked for information; and although *not* "a farmer," am still willing to receive it from any one who can give it, even though he be "a farmer."

3d. Mr. D. asks me to "define attraction." If he will put a small magnet on a floating chip, or piece of a shingle, and place it near another piece of iron similarly situated, and watch their motion; or suspend two cannon balls by long cords, near each other, or suspend one ball near the perpendicular surface of a precipitous mountain, and watch the effect, he will know as much about the nature of attraction, as the best of us. But is it wise or *philosophical*, to deny the existence of a thing that we cannot explain? If so, we must deny the existence of every thing, even of ourselves.

4th. Mr. D.'s taunting remark about my inference from his acknowledgment of being a "farmer," is entirely uncalled for and out of place; and the still more taunting one about my attachment to old "notions," I leave without further notice. My statement, that "I adhere to the Newtonian (theory) of the tides, *for want of a better*, ought to have shielded me from any such remark, as it was an acknowledgment that I was ready to abandon it for *a better*, which "better" I hoped D. could furnish.

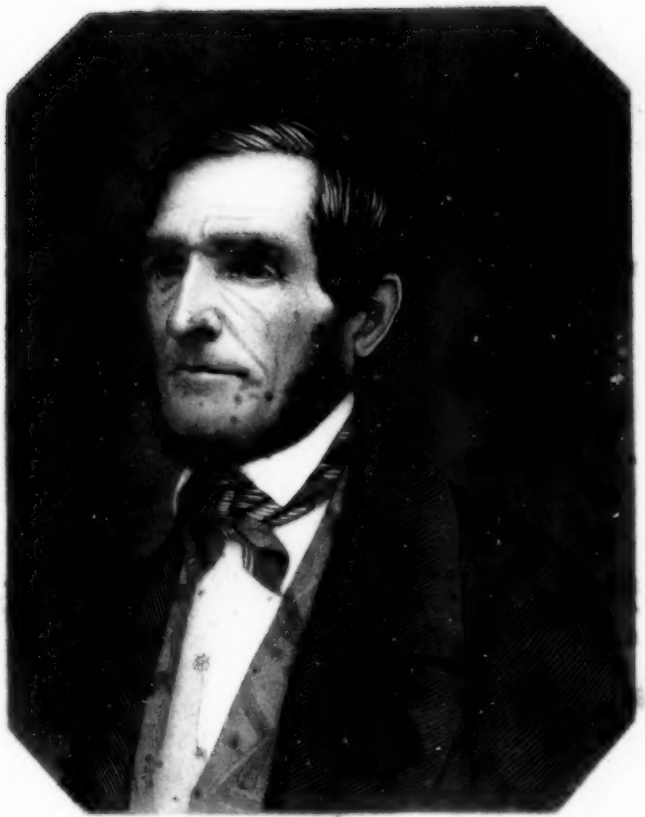
5th. Mr. D. says, "I did NOT intimate that I had a better theory." I have read again his communications in the March number of the Farmer, and can come to no other conclusion. But he denies it, and I have no more to say about it. Yet if "the laws of nature ARE ALWAYS SIMPLE," I cannot see why he has none. "*Down East*," *Dec.*, 1848.

AGRICULTURE, like the leader of Israel, strikes the rock—the waters flow, and the famished people are satisfied. She supplies all, she feeds all.



EARL SPENCER'S PRIZE SHORT HORN OX.

EXPLANATION.——A—Forehead. B—Face. C—Cheek. D—Muzzle. E—Neck. F—Neck vein. G—Shoulder point. H—Arm. I—Shank. J—Gambril or hock. K—Elbow. L—Brisket, bosom or breast. M—Shoulder. N—Crops. O—Loin. P—Hip. Q—Rump. R—Pin bone. S—Round bone, thurl or whirl. T—Buttock. U—Thigh, or gaskit. V—Flank. W—Plates. X—Back, or chine. Y—Throat. Z—Chest.



Engraved by T Doney

Z. Pratt

Tanner

SHORT HORN CATTLE.

We propose giving, in the present volume of the Farmer, portraits of animals of the various improved breeds. It will be our aim to present figures which shall convey as correct an idea of the distinguishing points of each breed as possible, in order to instruct our young readers and others unacquainted with the subject. With this object in view, we present the accompanying portrait of a properly shaped Short Horn, with explanations of the particular points of the animal, which must prove highly interesting to young farmers.

For this engraving we are indebted to Lewis F. Allen, Esq., author of the *American Herd Book*, in which work it originally appeared. In the introduction to his work, (which contains a history of English and American Short Horns,) Mr. Allen says:

"It is a mooted question with many of our American breeders as to what *extent* short horns can be profitably substituted for our native breeds. In this, circumstances must measurably govern. So far as climate is concerned, they have flourished equally well in all the northern, middle and the upper southern states. That they will equally succeed in the southern states, including Florida, Louisiana, and Texas, provided they be supplied with an abundance of their natural food, and sheltered from the extreme heats of the summer sun, is not yet a settled problem. Time will investigate this. A good, and a productive soil, yielding an abundance of pasturage in summer, with a fair quantity of winter forage, will content them. *True* short horns are moderate consumers, compared with their capacity to yield both milk and flesh.

There is an economical question connected with Short horns, which to the American breeder has great importance. If we are to become a beef and tallow, as well as a butter and cheese exporting country, as from the complexion of late events in Great Britain, it would appear, it is of the last importance that we produce a race of neat cattle which will give a high quality of beef, and that in the greatest quantity, as well as those possessing large dairy properties. Now, no animal whatever, is more strongly developed in the choice beef and tallow-bearing points, than the short horn. To illustrate our position we present a cut of a properly shaped Short horn, with designations of the particular points of the animal. This was drawn from hints by Mr. Rotch of Otsego county, New York, than whom few have a more accurate judgment in neat cattle."

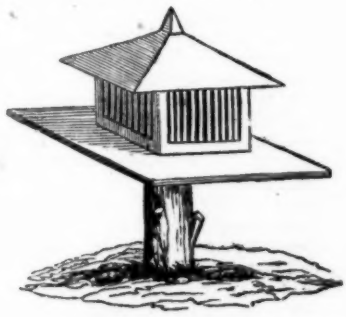
POULTRY FEEDING-HOPPERS.

BY C. N. BEMENT.

It is the practice with most farmers to feed their fowls grain, by strewing it on the ground from the hand. This is, however, considered by many as a slovenly and wasteful mode, and well calculated to invite rats and mice.

From experience we have found it more economical to keep grain constantly before them, where they can help themselves at all times; and for that purpose constructed several kinds of feeding-hoppers, but have been constantly annoyed by the depredations of rats and mice. Some of the patriarchs, grey with age, would not only help themselves sumptuously, but actually drive the fowls from their food.

Now, to obviate this difficulty, and to render them rat-proof, we present a plan, a figure of which accompanies this, which is so simple, that any man or boy who can handle a saw, a plane and a hammer, with a few nails, could make one in a few hours that would cost little or nothing.



Poultry Feeding-Hopper.

First make a platform of boards, say three feet square, then make a square sixteen inches in diameter of strips of an inch and a quarter plank, and three inches wide; nail this in the centre of the platform; saw four strips one and a quarter inches square, for the posts, which should be about eighteen inches high; nail strips of plank two inches wide to the posts at the top, to secure and steady them; then take common sawed lath, or thin strips of board one and a half inches wide, and nail them to the top and bottom, up and down, leaving a space of two inches between each slat, which will enable the fowls to insert their heads to pick the grain. The roof may be formed four square like the figure, or may be made flat, or pitched on two sides, like the roof of a house, and should be detached, so that it can be moved when grain is to be put in. Now, to make it proof against rats and mice, it will be necessary to elevate it a few feet from the ground, and this can be done by suspending it with wires, or setting it on a post firmly set in the ground, as represented in the figure. The wires being small and smooth, they could not pass down on them, and the platform projecting so far from the post, they would find it rather inconvenient to climb over the edge of the platform.

The fowls will soon learn to leap upon the platform, and feed from the grain-box between the slats. From ten to twelve fowls can feed at the same time.

This may be made self-feeding, by setting a funnel shaped box within, the small end reaching down to within half an inch of the bottom. The size or capacity may be varied according to the number of fowls kept. The foregoing is calculated for about one hundred fowls.—*Amer. Jour. of Agriculture.*

Gutta Percha—*What is it?*—This question is asked by thousands who have heard the name. It is a gum, similar to that of the caoutchouc or India rubber, but susceptible of more varied uses. It is thicker and heavier. Hose and gas pipes, boot and shoe soles, book bindings, canes, buckets, bags, cloaks, coats, and various other articles are made of it; and, altogether, it may be considered the most valuable vegetable gum ever discovered.—*Ex.*

See that all your domestic animals are properly attended to "about these days."

TO ASCERTAIN THE WEIGHT OF LIVE CATTLE.

THIS is of the utmost utility to all those who are not experienced judges by eye. By the following directions, the weight can be ascertained within a mere trifle: Take a string, put it round the breast, stand square, just behind the shoulder blade; measure on a foot rule the feet and inches the animal is in circumference; this is called the girth; then, with the string, measure from the bone of the tail which plumbs the line with the hinder part of the buttock; direct the line along the back to the fore part of the shoulder blade; take the dimensions on the foot rule as before, which is the length; and work the figures in the following manner; Girth of the bullock, six feet four inches; length, five feet three inches;—which multiplied together, make 31 square superficial feet; and that multiplied by 23 (the number of pounds allowed to each superficial foot of cattle measuring less than seven and more than five in girth,) make 713 pounds. Where the animal measures less than 9 and more than 7 in girth, 31 is the number of pounds to each superficial foot. Again, suppose a pig or any small beast should measure two feet in girth, and two along the back, which multiplied together, make 4 square feet; that multiplied by 11, the number of pounds allowed each square foot of cattle measuring less than 3 feet in girth, makes 44 pounds. Again, suppose a calf, a sheep, &c., should measure 4 feet 6 inches in girth, and 3 feet 9 inches in length, which multiplied together makes 15¾ square feet; that multiplied by 16, the number of pounds allowed to all cattle measuring less than five feet, and more than 3 in girth, makes 265 pounds. The dimensions of the girth and length of horned cattle, sheep, calves, or hogs may be as exactly taken this way as it is at all necessary for any computation or any valuation of stock, and will answer exactly to the four quarters, sinking the offal, and which every man who can get even a bit of chalk can easily perform.—*Chamber's Information for the people.*

PATENT SAFETY BRIDLE.—Mr. HENRY SEITZ, of Marietta, Lancaster county, Pa., is the inventor of a very ingenious Bridle for which letters patent were recently granted, whereby it is impossible for a spirited horse to kick or run away, and perfectly safe for a lady to drive or ride. The principle on which it is constructed is to hold the horse by the application of a pully around which the reins are made to pass at the side of the horse's mouth, which enables the rider to exert a great deal of lever power to control the mouth of the animal, to check him at any moment. We consider this a very useful improvement, as with some horses, especially when they are young, the old curb when pulled makes them to rear and pitch, to the great danger of the rider. This bridle effectually remedies this evil.

SHEARING OR CLIPPING HORSES.—We have seen specimens of this recently in the city, that would quite astonish the uninitiated. A long-haired, shabby-looking beast, after being a few hours under the hands of the shears, comes out with a close, smooth, shining coat, quite to the taste of the admirers of horse flesh. There are some advantages in this practice irrespective of the looks. The horse does not sweat so easily, and when once wet he dries more readily, and the tendency to colds is thereby materially lessened.—*Am. Agriculturist.*

REARING LAMBS.

LIKE all other young stock, lambs ought to be kept steadily growing, without getting too fat. Where a healthy, strong, and young ewe has a good range of pasture, the lamb may acquire so much fat as seriously to interfere with its thrift, when taken away and put upon its winter's food. Experienced flock masters say they have frequently lost lambs from this cause, and that when an ewe has twins, and the milk is divided between the offspring, this loss never occurs. This is an important fact for the practical man.

It is well to have the lambs accustomed to dry forage before they are put up for the winter. If good sweet hay, dry clover, or oats in the sheaf, or threshed, be thrown out to a few old sheep, surrounded by all the lambs, while the latter are in fine condition, brisk and lively, they will at once begin to nibble at the dry food, and soon will be entirely familiar with and enjoy it. If left, however, till weaned, and they have become pinched by the snows and frosts of approaching winter, and the scarcity and insipidity of autumnal forage, their stomachs are in a weak or diseased condition, they have no appetite for their new dry food, they stay away from the racks, and daily become weaker and more indisposed, and soon have become too far reduced to recover, or if they survive, it is with a constitution permanently impaired.—*Am. Ag.*

UNNATURAL AND INJURIOUS OVER-FEEDING OF ANIMALS.—At very many of the meetings and gatherings of the president, vice president, and members of council, as well as at the yearly, general, and country meetings of the Royal Agricultural Society, and, in short, at most agricultural societies, you will find this subject discussed, and correct views on it most strongly and urgently recommended, and instructions given to the judges are not to take into consideration the fatness of animals in awarding prizes to stock intended for the purpose of breeding.

In the face of these instructions what is the general result? Why, that year after year, and meeting after meeting, the premiums are still given to a most unnatural and (to breeding stock,) very injurious fatness. Fat is sure and certain to carry away the palm whenever placed in competition against rational and fitly-fed animals of every class and description, and that are in a natural and much safer condition for breeding, both as regards themselves as well as their produce, but they are not made almost immovable—most unwieldly, by their joints and sinews being, as it were, rendered of no effect by useless and injurious fat. Bear in mind that I confine my observations wholly and solely to breeding stock, and if the judges would, in awarding the premiums, take into consideration the aptness and fitness of condition for breeding, combined with shape, make, and quality, and give these their proper and right, and all-important place (even to the discarding of over-fed breeding animals,) they would be doing greater, truer, and stricter justice to the intentions and objects of the society, and confer a much greater benefit on those engaged in the breeding, not fattening (for they should be viewed and considered separately,) of animals, than by encouraging, as the awards mostly do, the great and injurious evil of feeding breeding stock so over and preposterously fat.

NEVER attempt to save seed from two sorts of Cabbage at the same time—they spoil each other.

Spirit of the Agricultural Press.

PROPHECY.—The Hon. JOHN LOWELL, in an address before the Massachusetts Society for promoting Agriculture, in 1818, made the following remarks in reference to the connection of chemistry with agriculture. They evince the wisdom and sagacity of an able mind:—"There are few persons who have read the late able and interesting work on agricultural chemistry, by Sir Humphrey Davy, who do not perceive its intimate connection with this important art, or who do not feel a prophetic conviction of its future usefulness." Mr. Lowell went on to say, that though he regarded this as a subject with which the practical farmer need not trouble himself, lest he should become "confused and bewildered," yet he thought there was "reasonable ground of hope, that men of leisure and science would be led to more accurate and philosophical views of agriculture, and that from their experiments their neighbors would derive great ultimate advantage."—*Cultivator.*

AGRICULTURAL PUBLICATIONS are among the most useful printed, and it is quite important to an improved system of farming, that they be widely disseminated. They add vastly to the productive wealth, comfort, and happiness of the country, and tend greatly to enlighten the minds of those engaged in cultivating the soil. It is the duty, therefore, of all to exert themselves in their dissemination. No man can well do a greater good to his country.—*Am. Ag.*

VERY TRUE INDEED.—Somebody says, when you see a man who curses when it rains, frets when a fog occurs, and smiles only when the sun shines, be sure that such a one can never bear up with fortitude against the attacks of misfortune, nor stand with equanimity the marvelous changes of our daily life.

POULTRY—*Hen and Chickens.*—A writer on this subject (and let no one say it is not an important one) in the Providence American, gives the results of his experience in economizing the time with hens, and we think them worthy of being communicated to our readers. All who are familiar with rearing chickens, know that there are very few hens that will allow newly hatched chickens to be committed to their care, when their own are a few days old. This the writer attributes to the fact that the hen has become acquainted with her own chickens, from color, marks, &c., and considers the new-comers in the light of intruders, which she too frequently punishes with death. To obviate this, he puts the first hen that hatches into a coop, and keeps her there with her chickens till another hen hatches, when he substitutes the second hen for the first, leaving the charge of the former; and when another hen hatches, she is put in place of the second, with all three broods—if the aggregate number do not exceed thirty, which he says she will take care of affectionately and efficiently.

PROFITS OF HENS.—Dr. J. Barstow, of Chicago, kept an account of the expense and income of fifty hens, for one year. The cost of keeping on corn, was about twenty-five cents for each hen. The hens averaged ninety-one eggs each. One of the editors of the *Prairie Farmer* states that he has kept forty hens the past year; that the cost was about the same as given by Dr. Barstow; but the fowls averaged only sixty-five eggs each. The fowls in both cases were confined to a yard, but one lot of them were allowed to have their liberty for a part of each day. They were fed with fresh meat occasionally.—*Cultivator.*

THE TEA PLANT IN THE UNITED STATES.—The planters and farmers of the Southern States will be gratified to learn that seven cases of black and green tea-plants, Chinese stock, have just arrived from London in the ship American Eagle, shipped by Dr. Junius Smith, during his late visit to that city. There are 500 plants, of from five to seven years' growth. All are designed by the Doctor as seed plants. A small quantity of tea-seed was brought out by him in the steamship Britannia, which was received in London overland from the northwest provinces of India. We understand the Doctor designs to proceed soon to the South, with a view of forming a plantation. More plants and seed are expected from India and China this season, and if we may judge from the progress already made, we have now the means in hand of extending tea plantations throughout such sections of our country as may be found adapted to their cultivation.—*Journal of Commerce.*

A BRIGHT plowshare is the cheapest commodity ever used by a farmer.—*Cobbett.*

IMPROVED ROAD SCRAPER.—Messrs. C. Schofield and G. J. Johns, of Albion, Illinois, have made a very useful improvement on a Scraper for making and repairing common roads, which should be adopted and employed by all our farmers in every township. It is especially useful for new settlements. The improvement consists in combining the *scoop* with a plow and having the scoop fixed to the standard by a swivel joint, so that by a catch lever connected with it, the scoop can be emptied with the greatest ease without tumbling over the scoop, which has to be done with the scrapers at present in use.

IMPROVED CIDER MILL.—At Madison, New Jersey, there is a cider mill which consumes about 1200 bushels of apples per day. The apples are not *ground*, or broken by squeezing between nuts as in the common cider mill, but they are cut into very thin slices by sharp knives around two revolving cylinders, and then pressed in a machine from which the juice comes out entirely free from the pulp and other things which are found in new cider at the old mills—the cider retaining its sweetness a longer time.

The price of apples was perhaps never lower than this year. The farmers bring them by the wagon load 10 or 15 miles, and sell them at the mill for five cents a bushel.

IMPROVEMENTS ON WINDMILLS.—Mr. Charles B. Hutchinson, of Waterloo, Seneca Co., N. Y., has recently made some valuable improvements on windmills both for self-regulating and reefing the sails. A common governor is used for the regulating of the angle of the sails to the wind, but this is employed in a most judicious and novel manner, for retaining the ends of the booms in slot when necessary, at an angle reverse to the allowing of the sails to present the square of their surfaces to the blast. This mode of self-regulation has been completely successful in practice during the most fitful windy days of this autumn.

PAGE'S PORTABLE WINDMILL.—This contrivance, constructed upon entirely new principles, is capable of producing great power with light winds, with no danger of being blown away by those that are heavier, as the sails are so constructed as to set instantaneously, and throw off any surplus that may occur. It has also a vane so arranged as to counterbalance the power used below, always keeping the wheel square to the wind. It is capable of being applied as a locomotive power—the one on exhibition having been so used, placed upon a common buggy wagon.—*Ib.*

PAGE'S PATENT PORTABLE SAW MILL.—This mill has been extensively used, and has fully recommended itself to the public. Mr. Page has made several important improvements upon it, and it is now very generally considered the very best mill extant for sawing lumber. Mr. Page (who is from Baltimore, Md.) has in his possession certificates from gentlemen of undoubted character, saying that with this machine they have cut 8,000 feet of inch boards in one day, with eight horses. He has moved his mill, after sawing 200 boards in the morning, thirteen miles in one day, and was sawing again before eleven o'clock the next morning, without any extra help other than in use at first—six horses and two men.—*N. Y. Farmer and Mechanic.*

BIG SHEEP.—It is stated that some of the sheep exhibited at the last show of the Royal Agricultural Society, were estimated to weigh as follows: Leicesters, of 16 months old, 46 lbs. per quarter; of the same breed, 3 years and 4 months old, 56 lbs. per quarter. Long-wools, (not Leicester,) 16 months old, 52 lbs. per quarter; of the same breed, 3 years and 4 months old, 72 lbs. per quarter. South-Downs, 16 months old, 36 lbs. per quarter; of the same breed, 3 years and 4 months old, 46 lbs. per quarter.—*Ib.*

THE ATMOSPHERIC CHURN OUTDONE!—The following description of a mode of churning practiced in Mexico, we think goes a little ahead of the "atmospheric" wonder: "Two tin cans are enclosed in a green cow-hide—the size to correspond to the quantity of milk. The hide, on drying, will shrink, and adhere to the cans. These cans are partly filled with milk, and placed like saddle-bags on a hard-trotting horse; a person then mounts the horse, and rides seven or eight miles into the city. The motion of the horse effects the separation of the butter from the milk, and the rider has only to pocket the cash for his butter and buttermilk, and wend his way home at his leisure."

TOOLS AND IMPLEMENTS.—Let every description of tools and implements be examined, have those requiring it repaired, and those not in use carefully put away under cover. Such attention saves both time and money.

Editor's Table.

TO CORRESPONDENTS.—Communications have been received, since our last, from Agricola, T. C. Peters, S. W., Horace L. Emery, *, L. Wetherell, A. G. P., Oscar Warren, I. A. Clark, A. H., D. Kingman, C. J. V., A Subscriber, H., S. C. Lee, R. H. Hoyt, M. D., S. Heston, C. H., A Young Farmer, N. W. H., H. Eaton, Nathan Marble, Buckeye, and A Friend to Ag. Improvement.

PAMPHLETS, &c., have been received from many known and unknown friends. If we get time to examine them, we will "report progress" in our next. We have been so constantly occupied, during the past month, with the business affairs of the Farmer, that we are also compelled to defer answers to many inquiries. Indeed, orders for the paper, requiring immediate attention, have reached us in such abnndant and unexpected profusion, that we have not even found leisure to peruse the numerous complimentary notices of the Farmer which are being "thrust upon us" by our brethren of the Press. While we feel duly grateful for these favors, and strive to bear the "blushing honors" with becoming humility, we must ask the indulgence of those whose communications, inquiries, &c., are not inserted or responded to in this number, or by letter.

THE AGRICULTURAL JOURNALS for January come to us teeming with the choicest emanations of thought and experience—embracing abundant *material* from which wealth and happiness might be coined by the millions of American Farmers. Would that these journals were better appreciated and more generally read by those most designed to be benefited in their publication. At present we can only notice some changes and improvements, and one or two new recruits. The *Ohio Cultivator* is changed from a quarto of 8 to an octavo of 16 pages—a decided improvement.—R. L. ALLEN, Esq., author of "American Agriculture" and "Domestic Animals," (two of the best practical agricultural works ever published in this country,) has become associate editor of the *American Agriculturist;* and the January number of that always excellent publication gives evidence of the additional strength.—The *Valley Farmer* is the title of a new monthly hailing from St. Louis. Mo. It is edited by H. GATES, (former editor of the Iowa Farmer, recently discontinued,) and E. ABBOTT. Published by PICKERING, PENN & Co.—20 pages quarto—at $1 per annum.—We regret to learn that the "American Journal of Agriculture and Science," published at Albany, N. Y,, has beeu discontinued for want of proper support. It was ably conducted by C. N. BEMENT, Esq.; but the price, ($2 per annum,) prevented the work from obtaining such a circulation as it deserved. We trust the editor will meet with abundant success in other pursuits.

DEVON STOCK IN MICHIGAN.—Among the published proceedings of the Kalamazoo Co. Ag. Fair, held at Schoolcraft, in October last, we observe the following item, and copy it for the benefit of our western readers:

"The executive committee were also much gratified at the exhibition of some full blood Devon Cattle by F. V. Smith, Esq. of Coldwater, Branch county, and would recommend them to the notice of breeders."

We understand that Mr. Smith's Devons were bred by E. P. Beck, of Wyoming county, from stock obtained of Wm. Garbutt, Esq., of Wheatland. Our western friends will find them worthy of attention.

GENESEE CO. AG. SOCIETY.—The Annual Meeting of this Society will be held at the American Hotel, in Batavia, on the *second Tuesday*, (13th) of February instant, at 10 o'clock, A. M.—for the election of officers and making out a premium list for 1849. A general attendance is particularly requested.

TOO MUCH BY HALF.—In a notice of this journal, the Prairie Farmer says our terms are $1 per annum. "No other paper has the news." However we presume brother WIGHT considers it worth the amount mentioned—and he is not the first person, or editor, that has voted the Farmer "too cheap by half." He is not far wrong about its having "a large circulation"—though in proportion to the expense of publication, it probably affords the least profit, per copy, of any periodical in the country.

IMMENSE EXPORTATION OF CHEESE.—Last Friday one house in this city cleared at the Custom-House, for Europe, 16,319 boxes and 287 casks of cheese, weighing 983,445 lbs. and valued at $68,841. This is an immense shipment for one day, and by one establishment.—*N. Y. Express.*

TO ADVERTISERS.—A large number of advertisements have been received for publication in the present number, which we could not insert. We shall issue an advertising cover next month, (on a separate sheet,) and will then endeavor to accommodate all who desire to avail themselves of its advantages—providing our terms are complied with. Among the advertisements received, which we cannot publish in full, we give below an abstract of the most important ones:—

Ayreshire Cattle.—C. N. BEMENT, of Albany, will sell at public auction, at Three Hills Farm, 3½ miles west of Albany, on the 14th of March next, his choice herd of Ayrshire Cattle—consisting of the imported Cow *Alice*, her daughter *Fairy*, [for which 1st premium was awarded at State Fair in 1847:] *Lassie* 3 years old; *Moggie*, 2 years; *Norma*, 1 year old; and *Jenny Deans* 9 months old. Two year old bull and bull calf. Also several head of cows and heifers, a cross of Ayrshires and Durhams. Two young boars and several breeding sows of the Medley breed.

SANFORD P. CHAPMAN, of Clockville, Madison county, sends us an advertisement from which we extract as follows:—"Durham Bull *Beuna Vista* for sale. Bred by Mr. VAIL; calved April 10, 1845; got by Meteor, (104 Amer. Herd Book.) Dam got, by Chas. Henry Hall's Meteor, out of Queen I, (page 219.) He possesses a first rate pedigree, is an excellent bull in appearance, and a good and sure stock getter. He is orderly, not vicious, and easily managed. He was awarded the 1st premium at the Madison Co. Show in 1848. Having another young bull I should like to dispose of Beuna Vista, as I do not need both. Price $200."

JNO. P. JEWETT & Co., of Boston, send us an announcement of *The American Fruit Book*, by S. W. COLE, author of "American Veterinarian,"—to be published about the 10th of this month. Price 50 cents.

We have likewise receieved an advertisement of "A good book coming," from a publisher in New York—but as he did not even pay postage, we do not think it worth while to give his name, or the title of the work, to our hundred thousand readers.

THE HON. LEWIS F. ALLEN'S ADDRESS to the N. Y. State Agricultural Society on Wednesday evening, on resigning his place to his successor, received from the Assembly a marked compliment. A copy of the Address, on motion of Mr. Pardee, was requested for publication and distribution, in advance of the Society's volume of Transactions. This is a compliment as rare as it was deservedly bestowed.—*Albany Argus.*

COMBUSTION.—Combustible bodies will not burn if dipped in a solution of potash or phosphate of lime, or muriate, sulphate, and phosphate of ammonia, with borax. The alkaline substances arrest the hydrogen, or prevent its combination with oxygen.

CLOTH MADE OF PINE APPLE LEAVES.—At Singapore in the East Indies, there is quite a thrifty branch of business in preparing the fibres of Pine apple leaf for exportation to China, where they are manufactured into cloth.

FLY IN THE WHEAT.—The Howard District (Md.) Advocate of Saturday says "Our farmers are loudly complaining of the ravages by the fly in the wheat. In many parts of the District they say some of the fields look sear and yellow. But we think they are croaking a little too soon."

DOG POWER.—The Scientific American contains a notice of a dog power, consisting of a wheel 11 feet in diameter, inside of which the dog works like a squirrel in his cage. The gudgeons turn on friction rollers. This power is applied to a circular saw, a lathe, and several other operations, such as churning, pumping and washing. It is said to be much superior to the old one so long in use for churning.

TWO CROPS OF RASPBERRIES THE SAME YEAR.—Mr. William E. Lyman picked upwards of half a pint of raspberries from his garden in this city, the past week, being the second crop of this year's growth. The berries were of fine size and flavor.—*Buffalo Commercial.*

PORK—USE OF CHARCOAL.—The Richmond Whig has the following: "We alluded the other day to the very general loss of pork sustained by the people in every part of the State in consequence of the weather. We would suggest to such persons, as this paper may reach in time, that the free use of charcoal upon meat which has been tainted has succeeded in many instances in restoring it."

THE NEXT FAIR of the N. Y. State Ag. Society, ir to be held at Syracuse, on the 11th, 12th and 13th of September.

HORTICULTURAL DEPARTMENT.

EDITED BY P. BARRY.

We are happy to hear from all parts of the Union that the cultivation of fruits is attracting universal attention. North and south, east and west, almost every individual who owns a lot of ground is alive on the subject. The emigrant who goes to the far west would rather go without money than without trees; and it is a noble idea, for what better monument could a man erect than the planting of a tree?

The question will naturally arise, how did such a sudden change come about? The Horticultural publications of the day will answer this question, and among them we will mention some of those which have been most active in the battle—"Downing's Fruit and Fruit Trees of America," "Hovey's Fruits of America," "Kenrick's American Orchardist," "Thomas' Fruit Culturist;" and among the monthly publications, "The Magazine of Horticulture," "The Horticulturist," the Albany and Boston Cultivators, and "Prairie Farmer." These publications have been and are continually passing through this vast country, like mighty engines, "clearing the way" of superstition and ignorance, and scattering broad-cast the choicest fruits in every direction; so that an individual who was but three or four years ago satisfied with a *Choke Pear*, a *Sour Crab Apple*, and a *Fox Grape*, will now have his Swan's Orange, Bartlett, Seckel, and White Doyenne Pears; Early Joe, Melon, and Northern Spy Apples; Black Hamburgh and Royal Muscadine Grapes, &c., &c.

In this great struggle for improvement the Genesee Farmer has not been an "idle spectator."—Every important advancement of Horticulture has been timely and duly noticed in its pages; and the choicest fruits have been figured and described—particularly our native varieties. In taking a retrospective glance of our past labors, however, we feel sensible that we have done but little. This is an age of improvement, and we shall endeavor to keep pace with its advancement.

The horticultural exhibitions have also been instrumental in bringing about this great changes; and our Pomological Conventions, with leaders of the first talent and experience in the land, what may we not expect them to accomplish? The interest manifested at the *first general Pomological Convention* ever held in this country, (in Buffalo,) gives us reason to hope that the spirit which moves the mass (somewhat similar to the great political excitement in times past,) will be exhibited at our future Conventions. Where and how could an intelligent individual spend a day or week more interestingly and profitably than among a choice collection of fruits, and a combination of talent only to be met with at such gatherings?

Another cause, and not the least, is the profit arising from the sale of fruits. The many articles which have appeared the past year in the public prints will be ample demonstration on this point, and therefore we forbear further comments. It will be seen, in a communication from the Editor, that there is an unfailing market for good fruits in England. If poor apples sell readily for 3 and 6 cents each, what may we not expect of choice varieties, such as the Northern Spy, Roxburry Russet, Esopus Spitzenburgh, Swaar, Pomme Gris, &c., &c.?

EDITORIAL CORRESPONDENCE OF THE FARMER.

The Season in England—Flowers, &c.—American Apples in Europe—French Pears in London Market—Vegetable and Flower Markets—Show of Smithfield Club, embracing Fat Cattle, Field Roots, Implements, &c., &c.—Gutta Percha—Glass Milk Pans, &c.

London, Dec. 14, 1848.

My Dear Sir:—As the Europa sails to-morrow from Liverpool, I thought I would send you a short gossip touching a few of the more interesting matters that have caught my attention since I arrived in England.

The winter, so far, has been remarkably mild.—The lawns are as bright and green as ours in the middle of May, and the gardens are yet gay with Roses, Chrysanthemums and Laurustinus, and other flowers. I am delighted, at every step I take, with the profusion of evergreens that fill up every little space throughout the cities. Laurels, Bays, Yews, Cypresses, Aucubas, Hollies, Junipers, Rhododendrons, Ivys, &c., clothe every wall and door yard with a verdure as fresh and luxuriant as we could hope for in the month of June. This is some compensation for the muddy streets and rainy, murky weather that continually prevails. I have not seen the sun half a dozen times since I have been here, and then only glimmering through a fog. I eat breakfast at eight in the morning, by candle-light, and dine at four in the afternoon by candle-light; we are hardly aware of its being day, till night returns again. It takes three or four days to accomplish the work of one.

Large quantities of American apples have been brought into Liverpool recently, but the most of them have been of indifferent quality, and badly gathered and picked, and hence they do not command high prices, nor do us any credit,—nor can the shippers gain by the operation. There is an unfailing market here for our orchard products, but to make the shipment of them profitable, it is absolutely necessary that select varieties be sent, that they be carefully hand-picked and packed in the best manner. One barrel will then sell for as much as three or four; and the frieght, which is the great item, will be no more on a barrel that will sell more readily for $5, than one that will bring only $2. Many of the apples I see here cried up as "nice American apples," "beautiful American apples," &c., would scarcely sell at all in our market, yet they are sold here at 3 to 6 cents each.

The English people have fairly given up growing apples for market, unless it be Codlins, &c., that come in early for cooking, and *Beaufins*, &c., for drying. They see it will be impossible for them to compete with American orchardists. Yesterday I examined two or three hundred varieties in the fruit rooms of the London Horticultural Society, and among them all there was not a single large, clear colored fine looking specimen. One would suppose, at first sight, that they were all wind-falls gathered from under the trees last August. The *Roxbury Russet*, *Fall Pippin*, and *Rhode Island Greening*, were among the best specimens, and they were not half the size we grow them. The most esteemed varieties pointed out to me by Mr. Thompson, such as *Pearson's Plate*, *Warmsley Pippin*, *Pomme Royal*, (not our Pomme Royal) *Golden Harvey*, *Sturmer Pippin*, &c., are small inferior looking things,—in size from that of a small *Pomme Gris*

to that of a *Siberian Crab*, — but they are generally harder and richer than ours. The Newtown Pippin and Roxbury Russet come nearer the English taste than any other varieties we cultivate. I had some Northern Spy and Melon with me, that I have here now in London in fine condition. They have elicited the admiration of all who have seen them. There are indeed no such apples to-day in England. The Northern Spy may be sent to Covent Garden market, just as well as to Fulton or Washington markets, New York. The pears in the markets here now, are from France or the Island of Jersey. They come in half-bushel baskets, containing 50 to 100, according to the size of fruit. They are packed in very dry soft meadow hay — a layer of this hay two or three inches deep is laid on the bottom, then a layer of fruit, then another of hay, and so on to the top,—the fruits are not allowed to touch, and in this way they go any distance with entire safety. I saw at Liverpool little baskets of *Glout Morceau* and *Chaumontel*, 50 in each, sold for $3 to $4 each to the confectioners and market-women to retail.

In Covent Garden Market, which is head-quarters for all rare and fine garden commodities, I see fine *St. Germains*, (the old one,) *Marie Louise*, *Passe Colmar*, *Winter Nelis*, *Beurre Rance*, *Easter Beurre*, &c., sold at 12½ to 18¾ cents each. If we ever succeed in raising pears beyond what may be required for home consumption, they will find market and good prices here. Not one person in a thousand, I might say five thousand, ever tastes a fine pear.— There is also a fair supply of new potatoes from Holland, sold at about twenty-five cents per quart. There is plenty of Asparagus, Brussels Sprouts, Rhubarb, Mushrooms, and all other vegetable luxuries. The Flower Market is very rich. Boquets are made up very tastefully by women who buy the flowers from the Florists and make a business of preparing and selling the bouquets. You can have a nosegay for a penny — a single rose and a leaf. For a shilling (25 cents) you can have a pretty Bouquet of Roses, Primroses, Heliotropes, Asaleas, &c. Go higher, and you get Camillias, Heaths, Epacris, &c.—higher still, and you get Orange Flowers, Cape Jassimines, Cyclamens and Euphorbias; and if you offer half a guinea ($2,50) you get a gem of beauty, combining all these, arranged with exquisite taste. So much for fruits and flowers, and I find that I must close on that head.

I found on my arrival in London that the Smithfield Club was holding its Annual Christmas Show of Fat Cattle. I embraced the opportunity to see it. The animals were all enormously fat, even to a downright deformity, — in many cases huge, unwieldly masses of fat, not inappropriately termed by some, "animated oil-cake and beet-root machines." The fattening process in the case of these animals appears to be carried to an extreme; no market requires it, and no profit can result from it, nor is any expected, I believe.

The purposes of the Club are to induce experiments that will test the capacities of the various breeds for fattening, and the effects of different sorts of food and modes of feeding. It undoubtedly brings out results that will be highly useful to the breeders and feeders of animals. Those who are engaged in these experiments are able to carry them out to any extent, and the public at large have the benefit of them. No restrictions as to feed are imposed; but the articles of food must be certified, as well as the age of the animals. The oxen and steers are divided into six classes, according to age, weight, &c.; cows and heifers into three classes, according to age; sheep into ten classes, according to breed and age; pigs into four classes, according to age. In the first class of oxen and steers, three premiums, amounting to £50 ($250) were awarded; in the second the same; in the third $225, and so on. From this you will see how considerable, I ought to say how princely, the premiums are; and so they ought to be, for most of the competitors are Princes, Dukes, Earls, and other nobles.

His Royal Highness Prince ALBERT, the Queen's husband, is an active member of this Club, and is showing masterly skill in the breeding and feeding of various sorts of live stock. He carried off the first prize of £30 ($150) in the first class of oxen and steers, for a Hereford ox 4 years and six months old, fed on oil cake, roots, bean meal, hay, and green food. The animal was very attractive. When I saw him, three of the best artists were taking his portrait. He was a low, small animal, of a dull red color, with a white face and chest. He belongs to what is called the white faced, or new Hereford breed. There were specimens of Short Horns, Devons, Scotch, Welsh, &c., all the most perfect of their kind. The show of sheep and pigs was varied and highly interesting; but I will not trouble you now with further details.

There was also a fine show of field roots. I saw extraordinary globe beets of yellow and red — Skirving's improved Swedes, some of them weighing 26½ pounds. Mr. SKIRVING carries on the nursery and seed business extensively at Liverpool, and continues from year to year to improve this valuable root. Our seedsmen will do well to supply themselves with his pure and genuine seed. Messrs. GIBBS & Co., of London, have the Globe Beet seed alluded to. There was a large display of implements, such as Drill Machines, Manure and Seed Drop Drills, Iron Plows and Harrows, Hay, Straw, and Chaff Cutters, Root Slicers, Oil-cake and Seed Crushers, Pipe and Tile Making Machines, and, in fact, all sorts of implements. Gutta Percha, that new and wonderful production, figured largely. An entire room was filled with articles manufactured from it. I noticed cart, carriage, and plow harnesses of all descriptions, water pipes, pails, riding whips, bowls, canes as pretty as rose-wood, and an endless variety of useful and fancy articles.

Glass milk pans are coming into general use among the dairy people. A great variety was exhibited. I saw patent sack holders on wheels, answering for a holder and barrow at the same time. Our millers and grain dealers ought to have it, and indeed farmers.

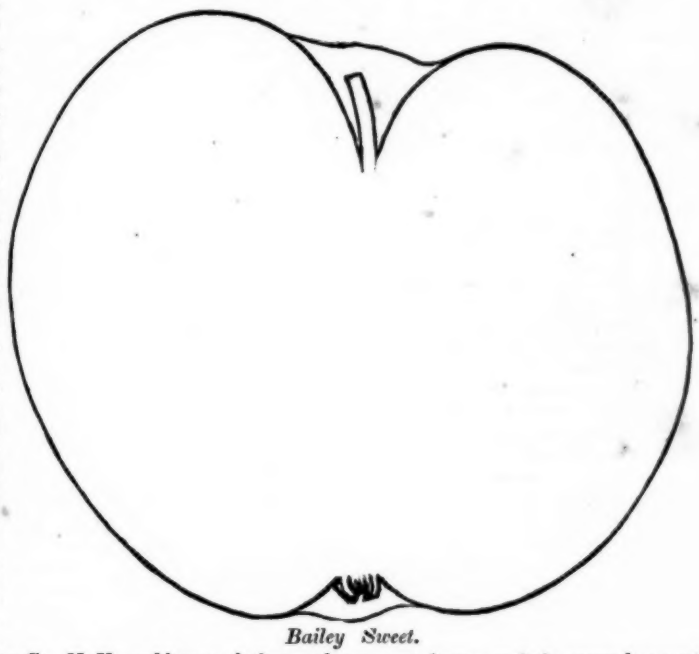
I have seen a multitude of things that I should like to tell you of; but I have already drawn this out too long. You will not be anxious to hear from me again for some time. The newspapers will tell you how the curious, impossible people of France have discarded their Cavaignacs, Lamartines, Marrasts, Ledru Rollins, and all their patriots that formed and preserved their Republic, and have placed LOUIS NAPOLEON, who has said something, but done nothing for them, almost by acclamation, in the Presidential chair.

Yours, P. B.

THE exhaustion of moisture by a plant is in the ratio of the surface of its leaves and stalks presented to the sun and air.

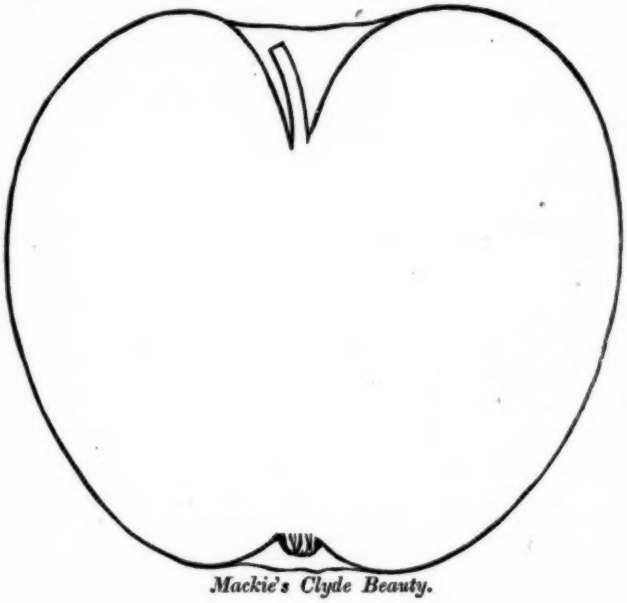
DESCRIPTION OF TWO FINE NEW NATIVE APPLES OF WESTERN NEW YORK.

We take pleasure in presenting our readers two new Apples of the highest excellence. We been acquainted with the Bailey Sweet for two years, and do not hesitate in saying that it is the finest looking and richest sweet apple of its season. Mackie's Clyde Beauty possesses all the good qualities of a first rate Desert Apple. It comes in at a season when good apples are very scarce, and hence it is particularly valuable. Both of these apples combine beauty and good quality.



Bailey Sweet.

Bailey Sweet — *Paterson Sweet.*—This is a splendid Sweet apple, received from E. A. McKay, of Naples, Ontario Co., who called it the *Paterson Sweet*, and is said by him to have been introduced from the east by Peter Paterson, of York, Livingston Co. Since then we have been informed from good authority that it originated with Calvin P. Bailey, Esq., of Perry, Wyoming Co., N. Y., and hence its name. Size very large, roundish oblong, slightly ribbed. Stalk about half an inch long, slender and in a deep cavity. Calyx closed and nearly covered with folds of the flesh that grows in around it irregularly, giving a peculiar appearance here. Skin smooth and fair, ground color pale yellow sometimes striped and mottled with bright red and stripes of darker, and some specimens entirely covered, except at the stem and eye, with bright red and clouded with small gray specks. Flesh yellow, fine grained and tender, with a rich saccharine flavor unequalled in so large a fruit. In form, color, size, &c., this fruit is admirable, and distinct from any we know. November and December. We kept some specimens until April last year.



Mackie's Clyde Beauty.

Mackie's Clyde Beauty.—A beautiful seedling Apple, from Mathew Mackie, of Clyde, N. Y. It originated in a seedling orchard of his father. The tree has been in bearing 12 years, and is a fine grower and bearer, size large, 2½ to 3 inches in diameter; form inclining to conical, broadest at the base, and tapering to the crown; slightly ribbed. Skin smooth and glossy — ground color of a pale greenish yellow, crimson in the sun, striped and mottled with light red in the shade. Stalk quite short and slender, in a deep and broad cavity. Calyx moderately deep, closed in a furowed basin. Flesh white, fine grained, juicy and tender, with a splendid sub-acid flavor. In use October, November and December. This apple is far better than the Autumn Strawberry and keeps later. Indeed, taking size, beauty and quality into the account, it must soon take its appropriate rank among the very best.

THE EUSTIS APPLE.

BY H. EATON.

MR. EDITOR:—I see in the February number of the Farmer, (Vol. IX, p. 58,) a notice of several New England apples, one of which is the *Eustis*. You say you believe it originated on the farm of JAMES EUSTIS, Esq., of Southboro, Mass., which is a mistake, as it originated on the farm of FRANCIS SMITH of South Reading, one of our first settlers, and is known here by the name of *Ben Apple*. It is thus noticed in a poem delivered by the Hon. LILLEY EATON at a Bi-centennial Celebration of the town of Reading in 1844:

"A son of Francis, Ben, by name,
First raised that apple, known to fame,
So juicy, rich, of flavor fine
That still for him is called the 'Ben.'"

It is one of the best apples that we have in New England; a late fall or early winter apple, but I have a friend that says he keeps it until July. It has been introduced of late years into Essex and Middlesex county nurseries quite extensively by a distinguished fruit culturist, JAMES EUSTIS, Esq., of this place—hence the name of *Eustis*. *So. Reading, Mass. Jan.*, 1849.

PRESERVING BUDS AND GRAFTS.—The mode suggested by T. G. YEOMANS of Walworth, N. Y., of preserving the scions of fruit trees in moist saw-dust, has proved superior to any other. It is better than damp moss in the facility with which the scion may be perfectly embedded in it, leaving no interstices, and it excels most sand in being lighter, more spongy, and entirely free from a grit which may injure a knife. We have without any difficulty preserved scions, which were cut in the summer, for budding, till the following spring, and inserted them as grafts with entire success; and we have kept winter-cut grafts till midsummer perfectly fresh, and employed them successfully in budding. A bushel of saw-dust will retain its moisture for many weeks nearly unaltered; but water must not be applied too copiously, or water soaking and decay will be the result. The north side of a building, or a cellar, is the best place.—*Farmer & Mechanic.*

M. MASSON, the head gardener at the Luxembourg, has lately grown a new root called the Ulucco, which can very well it is thought, replace the potato. It originally comes from Peru, and grows perfectly well in the open air; the flavor is very nearly the same as that of the potato. In addition, the part above ground furnishes a very agreeable vegetable, something like the bean in flavor. Three crops of the green part can be obtained the same season.—*Paris Paper.*

THE MELON APPLE.—Among the remarkably fine fruits shown at the Pomological Convention in New York, some specimens of this new apple, described in our last volume, were greatly admired. They were from Rochester and Macedon, N. Y. Its beauty, as well as its unusual juicyness and freshness of flavor, will make it much sought after as a dessert fruit.—*Horticulturist.*

AT Cheshire, Mass., there is an apple tree measuring thirteen feet in circumference, which has borne from ninety to one hundred and ten bushels of apples in a season.

Proceedings of Agricultural Societies.

N. Y. STATE AGRICULTURAL SOCIETY.

THE Annual Meeting of this Society, held at the Assembly Chamber in Albany on the 17th and 18th of January, was well attended by delegates from various sections of the State. The proceedings were very interesting, and characterized throughout with much harmony and unanimity; but we have only room to give a synopsis of the most important.

The Society designated SYRACUSE as the location of its next Annual Fair—provided security be given to the satisfaction of the Executive Committee, that the local expenses of the Fair, (not exceeding $3,500) be discharged by the inhabitants of that city.

Officers of the Society for the ensuing year were elected as follows:—

President—JOHN. A. KING, of Queens.

Vice Presidents—1st district, Jas. Monroe of New York; 2d, Saxton Smith, of Putnam; 3, E. P. Prentice, of Albany; 4, Le Roy Mowry, of Washington; 5, Wm. Fuller, of Onondaga; 6, David Maine, of Madison; 7, John Delafield, of Seneca; 8, Henry W. Rogers of Erie.

Corresponding Secretary—B. P. Johnson, of Albany.

Recording Secretary.—John McD. McIntyre of Albany.

Treasurer—Luther Tucker, of Albany.

Executive Committee—J. B. Burnett, of Onondaga; P. N. Rust, of Onondaga; Henry Wayne, of Oneida; J. J. Viele, of Rensselaer; Samuel Cheever, of Saratoga.

PREMIUMS AWARDED.

ON FARMS.—1st premium to H. F. E. Foster, Lakelands, Seneca co., silver cup, value $50. (Hon. P. Crispel, jr., of Ulster, having received the 2d premium last year, and being assigned the same position this year, the certificate of the Society and a set of transactions is awarded, pursuant to the rules of the Society.) 2d, E. C. Bliss, Westfield, Chautauque co., $30; 3d, McCullock & Kirtland, Cantonment farm, Greenbush, $20; 4th, John Carpenter, Wales, Erie county, Set Transactions.

Experiments for three years, with successive crops, to test the value of manures.—W. D. Osborn, Port Byron, $20

MANAGEMENT OF FINE WOOLED SHEEP.—Hon. D. S. Curtiss, Canaan, Col. co., $50. J. S. Randal, Clay, Onon. co., statement recommended for publication.

FARM CROPS.—*Winter Wheat, 2 acres.*—1st, Amos Miller, Vernon, Oneida co., 44 bush. per acre, $20; 2d, Ira Apthorp, Riga, Monroe co., 43 26-60 bush. per acre, $15; 3d, E. C. Bliss, Westfield, Chau. co., 43 bush per acre, $5.

Indian Corn, 2 acres.—1st, Hon. P. Crispel, Hurley, Ulster co., 90-5 bush. per acre, $20; 2d, Benj. Enos, De Ruyter, Madison co., 89-14 bush. per acre, $15; 3d, Levi F. Marshal, Vernon, Oneida co., 86-38 bush per acre, $5; Wm. Wright, Vernon, Oneida co., 114-36 bush per acre. (Mr. Wright had only one acre measured: as by the rules of the Society two were required, no premium could be awarded. From a statement furnished by Mr. Wright, it appears he had in the same field about ten acres, of which the yield was nearly equal to the acre measured.)

Barley, 2 acres.—1st, Melos Adams, Martinsburgh, Lewis co., 62½ bush. per acre, $15; 2d, Elisha M. Bradley, East Bloomfield, Ontario co., 60-9 bush. per acre, $10; 3d, Benj. Enos, De Ruyter, Madison co., 54-25 bush. per acre, $5.

Oats, 2 acres.—1st, Elisha M. Bradley, East Bloomfield, Ontario co., 89½ bush. per acre, $15; 2d, Daniel Jenison, Galen, Wayne co., 87½ bush. per acre, 10; 3d, Benj. Enos, De Ruyter, 86½ bush. per acre, 5.

Beans, 1 acre.—1st, E. C. Bliss, Westfield, Chautauque co., 33½ bush. per acre, $10.

Timothy Seed.—E. C. Bliss, Westfield, Chautauque, $5.

Flax.—E. C. Bliss, Westfield, 1 acre 24 rods, 18½ bushels seed, 431 lbs. lint, $5.

ROOT CROPS.—*Potatoes for table use.*—1st, Samuel H. Church, Vernon, Oneida county, 269½ bush. per acre, $15; Wm. Newcomb, Pittstown, Rensselaer co., experiments, 10.

Mangle Wurtzel, ½ acre.—1st, John Row, Riga, Monroe co., 1489 bush. per acre, at 50 lbs. per bush., $3.

Carrots, ¼ acre.—1st, Wm. Risley, Fredonia, at the rate of 1081 bush. at 50 lbs. per bush., $8.

Ruta Baga, 1 *acre.*—1st, Joseph Hastings, Brunswick, Rensselaer co., 1400 bush., at 50 lbs. per bush., $10.

BUTTER DAIRIES.—1st, John Holbert, Chemung, silver cup, value $50.

BUTTER.—1st, John Holbert, Chemung, $15; 2d, Hon. H. C. Tuthill, Cayuga, 10. (The above butter, comprising 5 tubs, was sold readily to gentlemen in this city at 25 cts. per lb., and had many more been exhibited of like quality the same price would have been paid.)

FRUIT.—*Seedling Winter Apple.*—1st, Chas. Lee, Penn Yan, Yates co., Wagener Apple, $5 and diploma.

An analysis of Indian Corn, for which the Society had offered the sum of $300, was presented by Jas. H. Salisbury, and the same has been referred to a committee for examination, and their report will be announced as soon as received.

Asa Fitch, M. D., of Salem, Washington county, has finished his survey of that county, for which the sum of $200 was appropriated, and it will be received in time for the transactions to be submitted to the Legislature.

DESIGNS FOR FARM DWELLINGS.—F. R. Elliot, of Cleveland, Ohio, presented a design of a farm dwelling with description, plan, and elevation, which were examined and are entitled to special commendation, and, although no premium was offered the present year, a diploma and silver medal is awarded. J. W. Ball, of Exeter, presented a description and plan of a farm house, which was very much approved, and a diploma is awarded.

EXHIBITION OF FRUITS.

From out of this State.—Montreal Horticultural Society, 20 choice varieties. Contributors, J. Frothingham, Esq., W. Lunn, Mrs. McIntosh, G. Shepherd.

Cleveland, Ohio, F. R. Elliott and Prof. J. B. Kirtland, 16 varieties; J. Gallup, 17.

J. C. Holmes, Esq., of Detroit, forwarded from A. C. Hubbard, Troy, Michigan, 15 varieties, and from Judge Hubbard, Plymouth, Michigan, 8 varieties.

Michael Gander, of Canada West, by Master Cleveland Allen, of Black Rock, 10 varieties.

The thanks of the Society were tendered to each of the contributors as well as to the Montreal Horticultural Society, and the Secretary was directed to forward to each the Diploma of the Society.

From our own State.—J. H. Watts, Rochester, fine specimens of the Northern Spy, and a beautiful painting of this fine fruit, and through Mr. Watts, from the following contributors: Thomas Johnson, Brighton, 5 varieties; H. R. Brown, Greece, 7; H. Hooker, Brighton, 11; C. K. Adams, Ogden, 6; T. Rhoorback, Greece, 12; J. C. Campbell, Rochester, 6. C. Paulk, Honeoye Falls, Seedling Pear.

John Delafield, Oakland, Newtown Pippins, and from Waterloo, through Mr. D., 24 varieties; from Tyre, 11; Romulus, 3; Junius, 1 variety, the King Apple.

Judge Miller, Rochester, 2 varieties Winter Pear.

John Donnilan, Greece, Monroe county, 7 varieties Apple.

Joseph Cary, Albany, Isabella and Catawba Grapes, very fine and as fresh as when picked.

B. Hodge, jr., Buffalo Nursery, 5 varieties and Stannard Seedling Apple.

Ellwanger & Barry, Mt. Hope Nurseries, fine specimens of Northern Spy and Melon Apples.

W. R. Coppock, Buffalo, 4 varieties.

B. P. Johnson presented, (from Cayuga co.,) 5 varieties.

Justus Harwood, United Society of Shakers, Niskayuna, 4 varieties. Samuel Rose, same Society, Watervliet, 6 var.

Herman Wendell, M. D., Albany, 4 varieties Winter Pear; 1 Apple, and 5 Painting Seedling Cherry.

T. C. Peters, Darien, Genesee county, 14 varieties.

Lewis F. Allen, Black Rock, 6 varieties apples.

H. Snyder, Kinderhook, 8 varieties.

Wilson, Thorburn & Teller, 13 var. Apple, 2 Pear.

A. Marks, Greene county, 4 varieties.

Dr. J. M. Ward, Albany, 7 var. from his farm in N. J.

J. M. Lovett, Albany, splendid Bouquet of natural grasses.

Fred. W. Lay, Greece, Monroe co., by J. Alleyn, Rochester, 12 varieties Apple. W. D. Osborn, Port Byron, 2 var.

James Wilson, Albany, splendid display of Camelia-Japonicas, &c., in full bloom.

Prof. Emmons, Albany, beautiful specimen of Painting of Currants. Hon. F. Bellinger, Herkimer, Middle Apples.

P. H. Warner, Columbia, Herkimer co., do.

Sheldon Goodrich, Aurelius, Cayuga co., 3 varieties.

A beautifully arranged box of Indian Corn, by Mrs. B. B. Kirtland, Greenbush.

The thanks of the Society were tendered to the Contributors, and a volume of Transactions to each.

Ladies' Department.

BOTANY.—FRUIT AND SEED.

[Continued from page 30]

THE FRUIT.—The ultimate object of the whole vegetable organization appears to be the production of fruit; which is the agent through which the reproduction of the species is accomplished. After the seed is perfected in annual plants, they soon wither and die: the flower alwnys precedes the fruit, and is necessary to its development and perfection. The fruit consists of two parts, viz: the *pericarp* and the *seed*, or the seed-covering and the seed: the pericarp is wanting in some plants, but the seed is essential in all. In the coniferous plants, as the pine spruce, &c., the seed is naked a nd destitute of the pericarp.

Fig. 1.

The PERICARP is the part which envelops the seed, whatever be its substance or structure. Fig. 1. In the peach and plum, this is a fleshy, pulpy substance,—in the oak and

Fig. 2.

walnut, a dense hard shell: (fig. 2.) thus the structure and composition of the pericarp varies in different plants, from a soft watery pulp to a dense shell. The process of the ripening of fruit consists of certain chemical changes produced by the action of light, heat and air, and perhaps other agents. Pericarps have received specific names, according to their form and structure:

Fig. 3.

that of the pea and bean is called a pod,—that of the walnut & butternut is called a nut,—that of the apple and pear, a pome,—that of the currant and whortleberry, a berry, &c.—Fig. 3.

This figure represent the pericarp, or seed capsule of the œnothera.

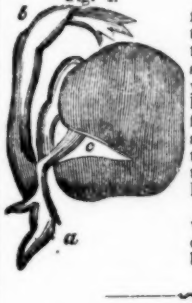
THE SEED.—The seed contains the rudiments of a new plant, and is the final product of all the complicated and beautiful processes of vegetation. The essential parts of the seed are, the *integuments*, the *albumen* and the *embryo*.

The *integuments* are composed of several distinct layers, which constitute the immediate coverings of the other parts.

The *albumen* lies next to the integuments, constituting the principal bulk of some seeds; it is a whitish substance composed mainly of starch, which, by the chemical changes which it undergoes during the process of germination, serves to nourish the embryo plant.

The *embryo* comprises all the rudiments of the new plant: it consists of three parts, viz: the *radicale* the *plumule*, and the *cotyledon*.

Fig. 4.



The *radicale* is the part which forms the root,—the *plumule* forms the ascending portion of the plant,—the *cotyledon* is the bulky part of seeds, and forms the first leaves of young plants, which in the garden bean, cucumber, &c., are thick, fleshy aud oval, when they first rise above the surface of the ground; these support the plant and perform the function of leaves until the proper leaves are formed.

[This figure shows an embryo with its plumule and radicale developed from the cotyledon: a, radicale; b, plumule; c, cotyledon.]

HEROIC WIFE.—One of the officers of Col. Washington's troops, in the expedition to the wilderness to California is accompanied by his wife and child. Who but an American woman would brave the perils of the Far West to be by her husband's side?

MOTHERS, strive not so to educate your children that they may be considered prodigies of learning, at the expense of health, perhaps life. Let mental and physical education go hand in hand—let health and knowledge embrace each other.

FEMALE EDUCATION.—It was a judicious resolution of a father, as well as a most pleasing compliment to his wife, when on being asked what he intended to do with his girls, he replied; "I intend to apprentice them all to their excellent mother, that they may learn the art of improving time, and be fitted to become, like her, wives, mothers, heads of families, and useful members of society." Equally just, but bitterly painful, was the remark of the unhappy husband of a vain, thoughtless, dressy slattern: "It is hard to say it, but if my girls are to have any chance of growing up good for anything, they must be sent out of the way of their mother's example."

A GOOD DAUGHTER.—A good daughter! There are other ministers of love more conspicuous than she, but none in which a gentler, lovelier spirit dwells, and none to which the heart's warm requitals more joyfully respond. There is no such thing as a comparative estimate of a parent's love for one or another child. There is little which she needs to covet, to whom the treasure of a good child has been given. But a son's occupation and pleasure carry him abroad, and he resides more among temptations, which hardly permit affection that is following him perhaps over half the globe, to be mingled with anxiety, until the time when he comes to relinquish the shelter of his father's roof for one of his own, while a good daughter is the steady light of her parent's house.—*Mary Mowatt.*

SCIENCE IN THE KITCHEN.—Professor LIEBIG, in a letter to Prof. SILLIMAN, says: — "The method of *roasting* is obviously the best to make flesh the most nutritious. But it does not follow that boiling is to be interdicted. If a piece of meat be put into *cold* water, and this heated to boiling, and boiled until it is 'done,' it will become harder and have less taste than if the same piece had been thrown into water already boiling. In the first case the matters grateful to the smell and taste, go into the extract—the soup; in the second, the albumen of the meat coagulates from the surface inward, envelopes the interior with a layer which is impregnable to water. In the latter case, the soup will be indifferent, but the meat delicious."

CORN BREAD.—We are in the daily habit of eating corn bread made after the following recipe, by our good landlady, Mrs. NORTON, of Astoria. It is equal to anything we ever tasted: — To one quart of sour milk add two teaspoonfuls, well stirred in, of finely pulverised saleratus, two eggs well beaten, one tablespoonful of brown sugar, and a piece of butter as large as an egg. Salt to suit the taste, and then stir in the meal, making the mixture about as stiff as for pound-cake. Now comes the great secret of its goodness. *Bake quick*—to the color of a rich light-brown. Eat it moderately warm, with butter, cheese, honey, or sugar-house molasses, as most agreeable to the palate.—*American Agriculturist.*

Boys' Department.

A WORD TO BOYS AND YOUNG MEN.

AN intelligent farmer remarked to us, a few days ago, that we "must talk to the boys, the young men of America, about increasing the circulation of this journal. They are the ones who are to be benefitted by the dissemination of books and papers devoted to agriculture and horticulture—for they are soon to cultivate the farms and manage the estates of their fathers. The 'old heads'—men of forty years of age and upwards—do not like to begin improvements in the decline of life, but prefer to continue in the track of their ancestors. In this age of progress, however, those farmer's sons who are entering upon active life, must avail themselves of the aid afforded by science and experience, or be and continue in the rear—a reproach to the age and their profession."

There is much good sense in the remarks of our friend, and we commend them to the careful consideration of our young readers. The great improvements being introduced will be adopted by the shrewdest and wisest, who will thereby realize profit; while those who, through either ignorance or prejudice, continue in the *old track*, will be losers. But a great many of the boys and young men of America are thinking and acting aright. We have now before us letters from several of them, the contents of which convince us that there is an increasing desire to cultivate the *mind* as well as the *soil*, and at the *same time*. They are doing much to increase the circulation and usefulness of the various agricultural journals of the country. The following letter from a young man in Erie county, N. Y., speaks to the point on this subject. Had we space, we could give letters from still younger friends (some only 15 years of age,) residing in different and distant sections of the country, who are actively engaged in disseminating books and periodicals pertaining to agriculture, horticulture, &c.

MR. MOORE:—I commenced taking your valuable paper when I was 17 years of age, and have now taken it three years, and hope to be always blest with that privilege.—Considering the importance of such a paper to the agricultural portion of community, I have embraced every opportunity in order to obtain as many subscribers as possible; and although I met with many prejudices it only increased my ambition—for I know that the GENESEE FARMER is one of the sunbeams which will eventually melt the ice of prejudice that has so long bound our country in relation to Scientific as well as Practical Agriculture. And I think, if the time has not already come, it is not far distant, when the name of *farmer* will be crowned with many honors.

I have increased the number of subscribers from 17 (which I think was the number taken the past year,) to 45—and, with the hope of getting more, I remit for fifty copies.

OSCAR WARREN."

PREMIUM ARITHMETICAL QUESTIONS.

BY I. A. CLARK.

FRIEND MOORE:—I have noticed in some of the late numbers of the Farmer arithmetical questions for farmer's sons; and as some may have leisure during the long winter evenings to solve a few more, I send you the following. Some hard nuts for farmer's boys to crack:—

$5 *Premium.*—On the side of a mountain grew a lofty fir, which, being broken by the wind but not severed, the top [C,] struck below the foot of the tree [B,] 50 feet, and a right line [B, E,] from the base of the tree to the body is 30 feet. What is the length of the pieces—the height of the tree [B, C,] being 150 feet?

$3 *Premium.*—In two right angled triangles A, B, E, and D, B, C, right angled at B, we have the side A, B, = 40, B, C, = 50 and D, E, = 30; required D, B, and B, E.

$2 *Premium.*—If 7¼ oxen eat 4¼ acres of grass in 2 weeks, and 12 oxen eat 4 2-5 acres in 5 weeks, how many oxen will eat 60 acres in 8 weeks?—the grass being at first equal on every acre and growing uniformly.

The above questions are found on the 176th page of the "Prussian Calculator," and the premiums for the best solutions will be paid in books. The solutions can be sent to your office or to my address, "Lakeville, Livingston Co., N. Y." Yours truly, ISAAC A. CLARK.

ARITHMETICAL QUESTIONS.—We wish those who furnish us with Questions for this department not only to make their questions perfect, but to furnish us with the answers, as no question will be inserted unless the answer accompanies it.

BOYS, if you would be *respected*, try to BE what you would have others think you are—if you would be *happy* yourselves, try to make others happy.

Books on Agriculture, &c.—The Publisher of the FARMER keeps constantly on hand a large assortment of the most popular and valuable works pertaining to Agriculture, Horticulture, and Rural and Domestic Economy, which will be sold at the lowest cash prices. The names and prices of a portion of the books are annexed:—

American Farmer's Encyclopedia. $3 50 in leather—cloth $3.
American Shepherd, by Morrell. $1.
American Agriculture, by Allen $1.
American Poulterer's Companion, by Bement. $1.
American Veterinarian, by Cole. 50 cents.
Buist's Kitchen Gardener. 75 cents.
Buel's Farmer's Companion. 75 cents.
Chaptal's Agricultural Chemistry. 50 cents.
Downing's Fruits and Fruit Trees of America. $1 50.
Domestic Animals, by R. L. Allen. Cloth, 75 cts.; paper, 50 cts.
Farmer's and Emigrant's Hand-Book. $1.
Fruit Culturist, by J. J. Thomas. 50 cents.
Gardener's Farmer's Dictionary. $1 50—leather, $1 75.
Horse's Foot—and how to keep it sound. 25 cents.
Johnson's Agricultural Chemistry. $1 25.
Loudon's Ladies' Flower Garden. $1 25.
Liebgig's Agricultural Chemistry. (new edition.) $1—paper, 75 cts.
Liebgig's Agricultural and Animal Chemistry, (pamphlet editions.) 25 cents each
Parson's on the Rose. $1 50. Prince on the Rose. 75 cents.
Rural Economy, by Boussingault. $1 50.
Stable Economy, by Stewart. $1.
Scientific Agriculture, by Rodgers. 75 cents.
Smith's Productive Farming. 50 cents.
Treatise on Milch Cows. 38 cts. Treatise on Guano. 25 cents.
Youatt on the Horse. (new edition.) $1 75.
Youatt on the Pig. 75 cents.

☞ Orders from a distance will receive prompt attention, and the books forwarded by mail or Express as desired.

Address to D. D. T. MOORE,
Jan. 1, 1849. Rochester, N. Y.

Ketchum's Mowing Machine.—*Patented July* 10, 1847.—The undersigned, sole proprietor of the above machine in the States (among others) of Ohio, Michigan, Indiana, Kentucky, Tennessee, Virginia, Maine, New Hampshire, Vermont, Rhode Island, &c., and of the counties of Dutchess, Columbia, Greene, Washington, West Chester, Saratoga, Delaware, Albany, Rockland, Schenectada, Richmond, Livingston, Oneida, Monroe, Rensselaer, Otsego, Wayne, Tompkins, Chemung, Broome, Steuben, Hamilton, Montgomery, Putnam, Warren, Onondaga, Niagara, Cattaraugus and Chautauque, in the State of New York, now offers it to the public with the utmost confidence in its success.

During the past season it has been perfected and thoroughly tested. During each day of the late State Fair, at Buffalo, its operation was witnessed by hundreds, and the perfect manner of its cutting universally acknowledged.

The subscriber has also purchased the right of "Pease's Improvement on Reaping Machines," (patented Nov., 1848,) which improvement consists in a platform attached to the machine (as represented in the cut,) and from which the grain is raked off by the driver of the team, by means of a lever—thereby throwing off the grain entirely out of the track of the machine in its next turn round the field, rendering one man only necessary for its management, and leaving the grain in the proper sized bunches ready for binding.

The attachment of this "rake off" (the expense of which is $25 only,) enables the farmer to cut his hay and grain with the same machine.

Orders for the purchase of rights or for machines, directed to the subscriber at Buffalo, N. Y., will meet with attention.

[2-3m*] S. W. HAWES.

Scions of Choice Fruits.—Scions of all the leading varieties of fruit can be furnished by the subscribers. Money enclosed by mail with order will receive prompt attention.

ELLWANGER & BARRY.
Mt. Hope Nurseries, Rochester, Feb. 1, 1849.

Scientific Agriculture, or the Elements of Chemistry, Geology, Botany, and Meteorology, applied to practical Agriculture: by M. M. RODGERS, M. D., with the approval and assistance of several practical and scientific gentlemen. The work is illustrated by a large number of engravings, and is published in a neat style, well bound, and sold cheap.

NOTICES OF THE WORK.

"The general correctness, brevity, clearness, and multitude of its principles applicable to practical agriculture, that first and best of arts, commend the work to the youth of our land, as well as to its older and younger agriculturists."—*Prof. Chester Dewey, Principal Rochester Collegiate Institute.*

"This is an interesting and much needed volume, well adapted to the wants and taste of that intelligent portion of the community for whom it is more particularly adapted—making combined a complete system of agriculture, easily understood and readily defined."—*N. Y. Farmer and Mechanic.*

"It appears to be exceedingly well adapted for the purpose of instruction. It is concise and plain—neither too much nor too little."—*Hon. Zadock Pratt.*

ERASTUS DARROW, Publisher and Bookseller,
Corner Main and St. Paul-streets, Rochester.

☞ For sale by the Publisher; also, at the office of the Genesee Farmer, and by Booksellers generally. [1-1t*]

Genesee Seed Store and Ag. Warehouse—*Irving Hall, opposite the Eagle Hotel, Buffalo st.*—Having purchased the Agricultural and Seed department of Messrs. NOTT, ELLIOTT & FITCH, we intend going more extensively into all the branches of our business. We shall keep constantly for sale, all kinds of *Imported and American Field and Garden Seeds*, and a large assortment of the most approved *Implements and Machines* used by the Gardener and Farmer. We manufacture Pennock's Wheat Drill, (the most perfect and substantial Drill in use,) the celebrated Massachusetts Eagle C Plow, Drags, Cultivators, &c., &c., all of the most approved patterns and construction, and keep a full supply of all the Boston and Worcester Plows, Sub-soil, Deland, Burrall's Shell Wheel, Anthony's Patent index, &c., &c.

Straw and Hay Cutters.—We keep all the approved patterns of Straw Cutters, and would especially invite particular attention to our assortment of Ruggles, Nourse & and Mason's Patent, to which was awarded the 1st Premium at the late State Fair at Buffalo, and for which we are the sole agents in Rochester.—There are 14 sizes of this cutter, varying in price from $10 to $28.

Corn Shellers.—All the different sizes of Burrall's celebrated Sheller. Also, Clinton's and other approved patterns.

Clover and Timothy Seed for sale.

Rochester, Jan. 1, 1849. RAPALJE & BRIGGS.

Agricultural Warehouse and Seed Store at Buffalo.—At the request of numerous friends, we have opened an Agricultural Warehouse and Seed Store, and have made such arrangements as will enable us to keep on hand a large and full assortment of implements of any useful kind.

We have also arrangements for Trees and Seeds equal to any other establishment in the Union. Orders and patronage solicited. Manufacturers are requested to send us samples of their implements and machines. T. C. PETERS & BRO.,

Corner Washington and Exchange-sts.
Buffalo, Jan. 1, 1848. [1-3t]

Albany Agricultural Warehouse and Seed Store.—The subscriber being a sufferer by fire, in common with a large portion of the citizens of Albany, (having lost his store and stock on the 29th of October last,) has secured for a term of years the new and extensive store, No. 369 Broadway, or old Market-street, a few doors south of the Post Office. This store being 145 feet deep and four stories high, is much larger than his former one, running through from Broadway to the Canal Basin; and Broadway being the principal thoroughfare in the city between the Boat Landings and the Depots, the location is readily found. These advantages, with the increased facilities, will enable him to transact many times the business heretofore done by him, and more convenient for the trade generally.

In connection with these changes, he is erecting an extensive manufactory in the central part of the city, sufficiently large to accommodate over one hundred mechanics, and a proportionate amount of labor-saving machinery, which will enable him at all times hereafter to execute orders with despatch. A continuance of the very liberal patronage heretofore bestowed upon his establishment is solicited. H. L. EMERY.

January 1, 1849.

Mt. Hope Garden and Nurseries, Rochester, N. Y.—The proprietors of this Establishment solicit the attention of Amateurs, Horticulturists, Nurserymen and dealers in trees, to their present large stock of well grown, thrifty and healthy FRUIT TREES—comprising the very best varieties of Apples, Pears, Peaches, Cherries, Plums, and all other fruits. Their stock of *Dwarf Pears, Apples & Cherries*, for garden culture, is the largest in the Union.

The stock of Ornamental Trees and Shrubs is also very large, and can be furnished at low prices. Also, *Hedge Plants*, such as Buckthorn, Privet, Osage Orange, Norway Spruce, Hemlock, Red Cedar, American Arbor Vitæ, &c., &c.

All orders promptly attented to, in the best manner. Catalogues forwarded to all *post paid* applicants.

Jan. 1, 1848. ELLWANGER & BARRY.

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Market Prices of Agricultural Products.

New York, Jan. 23, 1849.

FLOUR AND MEAL.—Flour business in flour. Transactions reach 4000 at $5,50 a 5,65, for common to desirable. Not easy to get fair parcels below 6, 56—included were 500 bbls. New Orleans at $5,50—pure sold at $5,87a6. Meal $3 for Jersey. Rye Flour $3,25 a3.37½.

GRAIN.—Nothing doing in wheat, except small parcels Long Island at $1.08a1.10. Corn in moderate demand—sales 15.000 bu. at 57a58 for N. O. and new white—69 for old, and 64a65 for yellow. Oats 35a36.

PROVISIONS.—In Pork not much movement—Ohio is $12,50a13,50—sales 400 bbls. state at $12.50a14 and 150 bbls city prime at $13,50. Beef steady, with sales 300 bbls. at $12,50a13 for mess. Lard 6¾a7. Pickled meats quiet. Sales 20,000 pounds greese Lard at 5½. Dressed Hogs $6a6¾.

TALLOW—sales 20,000 lbs. at 8¾ cash.

ASHES dull—small sales at $6.75 for Pots. Pearls $7.87½.

COTTON—business to fair extent at steady prices, with sales 1600 bales. Fair upland 7¾a7½—Orleans 7¾a8.

Rochester, Jan. 23, 1849.

FLOUR $5,50. Wheat $1,15. Corn 44 cts. Oats 25 a 28. Rye 53c. Barley 50c.

PROVISIONS.—Pork in hog $5.25—mess $13a14. Beef, cwt. $3.50a $4. Hams 7 cts. Butter 12a15 cts. Cheese 6a6¼ cts.

SEEDS.—Clover $3,50a4. Timothy $1,25a2. Flax $1.

Bound Volumes of the Farmer.

THE NINTH VOLUME OF THE FARMER, for 1848, just completed, and for sale bound or in numbers, as preferred. It contains a larger amount of matter pertaining to Agriculture and Horticulture than any similar work of the same price ever published—and is illustrated with OVER EIGHTY ENGRAVINGS Price, 62½ cents bound in boards and leather—or 50 cents in marble paper, with cloth backs.

Also—complete sets of the Farmer from its commencement, (except the 2d volume,) substantially bound, which we will sell at 50 cents per volume. These volumes are not suitable for sending by mail—but we have copies of vols. 6, 7, and 8, bound in paper covers, which may be mailed.

THE GENESEE FARMER,

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE,

ILLUSTRATED WITH ENGRAVINGS OF

Farm Buildings, Domestic Animals, Implements, Fruits, &c.

THE TENTH VOLUME of this Journal will commence on the 1st of January, 1849. In making this announcement to his AGENTS and the FARMERS and FRUIT CULTURISTS of the country, and again asking their support in behalf of the work, the Publisher has the satisfaction of stating that the GENESEE FARMER now has a circulation EXCEEDING, BY SEVERAL THOUSAND, that of any similar periodical published in America. This fact, alone, furnishes abundant evidence of the *real value* and *superior merit* of the work—for no journal, however cheap, can become and continue so universally popular, unless actually WORTHY of the substantial support of an intelligent community.

The Genesee Farmer is, beyond dispute, *the cheapest Agricultural and Horticultural Paper in the World!*—and the Proprietor is determined to make it the NEATEST and BEST. We confidently ask for it that support which it *merits* from the Farmers, Gardeners and Fruit Culturists of the United States.

TERMS—INVARIABLY IN ADVANCE—AS FOLLOWS:

Single Copy, 50 Cents. Five Copies for $2, and any greater number at the same rate, if directed to individuals. If directed to *one person*, Eight Copies for $3, and any additional number at the same rate. The entire volume sent to all subscribers.

☞ POST-MASTERS, AGENTS, and all friends of improvement, are respectfully solicited to obtain and forward subscriptions.

Subscription money, if properly enclosed, may be sent (postpaid or free,) at the risk of the Publisher. Address to

D. D. T. MOORE, Rochester, New York.

Competitors for our Premiums.

BELOW we give the names of the principal competitors for our January and April Premiums. The three first are entitled to the January premiums of $20, $10 and $6. The names are given in regular order—commencing with the person sending the largest number. Those in parenthesis are equal, or tie:

Silas H. Swetland, V. W. Sunderlin, E. C. Bliss, Apollos Kent, J. D. Stone, J. H. Stanley, Silsby & Keeler, O. Warren, B. Farr, (H. J Ray, E. F. Munson, W. Lyman,) H. Frisbie, W. L Booth, (E. S. Marvin, D. P Chamberlain,) Moses Eames, S. Heston, (S. Lee, L. Strobridge, L. A. Miller, R. Clark, C. H. Carter) (W. Churchill, A. Eaton John White,) W. Hadley, (Jo. Wykoff, C. L. Young, Luman Shepard, John Davis, R. Sears,] [Wm. Chamberlain D. M. Smith, H. Munson,] J. M. Trowbridge, E. W. Gerrish.

Farmer Office, Rochester, Jan. 25, 1849.

To Agents, Post-Masters and Subscribers.

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THE GENESEE FARMER,

Published on the first of each month, at Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE & D. D. T. MOORE, EDITORS.

P. BARRY, Conductor of Horticultural Department.

Fifty Cents a Year, in Advance.

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STEREOTYPED BY JEWETT, THOMAS AND CO., BUFFALO, N. Y.